

Final Alternative Urban Areawide Review and Mitigation Plan

Marion Road Trunk Sanitary Sewer Project

This document incorporates by reference the Draft Alternative Urban Areawide Review and Mitigation Plan completed in April 2002.

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City of Rochester

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PART 1 - COMMENTS RECEIVED AND STAFF RESPONSES



**City of Rochester
Department of Public Works
June 3, 2002**

**COMMENTS RECEIVED AND STAFF RESPONSES
Concerning The
DRAFT ALTERNATIVE URBAN AREAWIDE REVIEW (AUAR)
and MITIGATION PLAN (April 2002)
For The
Marion Road Trunk Sanitary Sewer Project**

Comments have been arranged according to the AUAR items as identified by the text boxes. Comments received are in normal text following the name of the organization or the commenter in bold text. Staff responses are in bold underlined text.

Note: All comments referenced herein were received as responses to the Draft AUAR, which was published in the April 15, 2002 Minnesota Environmental Quality Board (EQB) Monitor as required by Minnesota Rules, Chapter 4410.3610. Comments received note the name of the commenter, and include quotes from their comments as they relate to the Draft AUAR item in question.

Introductory Information

Since the Draft AUAR was completed, Olmsted County Land Use Plan Amendment #02-04 was submitted by Marion Township to re-designate approximately 473 acres of land in Sections 22 and 27 from the Resource Protection Area and the 50 Year Urban Reserve Area to Suburban Development Area. This amendment was heard by: the Olmsted County Environmental Commission on March 20, 2002, the Olmsted County Planning Advisory Commission on May 2, 2002, and the Olmsted County Board on May 28, 2002. This amendment was approved by the Olmsted County Board on May 28, 2002 and will change the ultimate jurisdiction for these acres from the City to Olmsted County and Marion Township. The mitigation plan, therefore, will not apply to the portion of the project area east of Co. Rd. 11 (or 50th Avenue SE). This land use plan amendment will not result in an increase in development density above that proposed in the AUAR, nor does it change the environmental analysis upon which the mitigation measures were based for the remainder of the project area. Therefore, revisions to the AUAR project boundary will be made at the time of the next AUAR update.

Part III - Mitigation Plan

Katie Dudley

“I was at your presentation for the Zumbro Land Conservancy and I agree [with] a person’s comment that was made regarding non-native vegetation or invasive species. Landscaping around the homes near woodland areas and the seeds being spread with equipment could be a big concern in some areas where there is a vital “natural” plant community. I feel that prime prairie areas and woodlands should be well managed to preserve their purity and habitat qualities.”

“I really hope AUAR is utilized by the developers to protect natural communities as much as possible and politicians use it to take a stand on environmental issues with developers. My fear is that there will not be any penalties or desire by developers to cooperate with the AUAR suggestions if they are not made into a law of some kind. Or at least create different zones that are enforced.”

“Hope this makes sense. You’ve done a good job on the project – I look forward to seeing the Olmsted County Open Space Plan coming out in the future.”

Staff Response: Thank you for your comments regarding the AUAR process. The City will develop a reference pamphlet or other educational tool that identifies best management practices such as equipment cleaning and topsoil source evaluation to prevent the undesirable spreading of exotic species (e.g., purple loosestrife) and diseases (e.g., oak wilt) during development or infrastructure construction projects.

The City is confident that many developers and residents will work to protect environmental resources in appropriate settings once they have the necessary information, an understanding of the value of those resources for their development, and knowledge of design alternatives for incorporating environmental protection measures into their site design, thereby reducing the need for additional regulatory or enforcement provisions. We do recognize, however, that it will be necessary to provide clear and complete information

before development planning activities begin in order to be effective with a voluntary approach.

Zumbro Valley Audubon Society – O. William Bruins

“Require contractors hired to do work, such as laying sewer or water lines that pass through natural areas to thoroughly clean all equipment, mechanical or otherwise, to reduce the chance of introducing alien species into the natural area.”

Staff Response: The City will develop a reference pamphlet or other educational tool that identifies best management practices such as equipment cleaning and topsoil source evaluation to prevent the undesirable spreading of exotic species (e.g., purple loosestrife) and diseases (e.g., oak wilt) during development or infrastructure construction projects.

Minnesota Pollution Control Agency

“Based on the information contained in the AUAR, the MPCA staff believes that significant effects related to MPCA issues are not likely to occur as a result of the project. However, please review and consider the following comments:”

“The AUAR is a good compilation and analysis of a wide variety of information on the Marion Township review area. The document also provides a sound assessment of the environmental impacts likely to result from the development the sewer extension will allow.”

“The MPCA, however, does have concerns about the proposed mitigation efforts. In general, the document suggests that existing local programs will provide adequate mitigation. We question whether this is the case. It would be useful if the City of Rochester would describe areas where a higher level of mitigation may be necessary and how such mitigation would occur.”

Staff Response: The City feels their existing, comprehensive local plans and ordinances do provide adequate mitigation. The following paragraphs explain how Rochester’s and Olmsted County’s planning documents are related to “comprehensive planning,” as defined by statute and the rules governing AUARs. State law defines comprehensive planning in enabling legislation authorizing cities and counties to carry out planning. EQB rules also define the term. Since the AUAR project area includes land both within and outside the municipal limits of Rochester, the paragraphs below address both municipal and county planning law.

MUNICIPAL PLANNING

Section 462.535, Subdivision 5, of Minnesota Statutes defines a “Comprehensive Plan” for municipal planning as follows:

“Comprehensive municipal plan” means a compilation of policy statements, goals, standards, and maps for guiding the physical, social and economic development, both private and public, of the municipality and its environs, including air space and subsurface

areas necessary for mined underground space development pursuant to sections 469.135 to 469.141, and may include, but is not limited to, the following: statements of policies, goals, standards, a land use plan, including proposed densities for development, a community facilities plan, a transportation plan, and recommendations for plan execution. A comprehensive plan represents the planning agency's recommendations for the future development of the community.

The Statute is permissive (the plan "... may include, but is not limited to ...").

Minnesota Rules parts 4410.4300 subpart 19, Item A, subitem 4, and Minnesota Rules parts 4410.4400 subpart 14, Item A, subitem 4 specify comprehensive plan elements for cities outside the seven-county metropolitan area as including the following:

- (1) a land use plan designating the existing and proposed location, intensity, and extent of use of land and water for residential, industrial, agricultural, and other public and private purposes;
- (2) a transportation plan describing, designating, and scheduling the location, extent, function, and capacity of existing and proposed local public and private transportation facilities and services;
- (3) a sewage collection system policy plan describing, designating, and scheduling the areas to be served by the public system, the existing and planned capacities of the public system, and the standards and conditions under which the installation of private sewage treatment systems will be permitted;
- (4) A capital improvements plan for public facilities; and
- (5) An implementation plan describing public programs, fiscal devices, and other actions to be undertaken to implement the comprehensive plan, and a description of official controls addressing the matters of zoning, subdivision, private sewage systems, and a schedule for the implementation of those controls. The EOB chair may specify the form to be used for making a certification under this item.

The language of the rules is less permissive than the Statute.

The City of Rochester has had a Comprehensive Plan meeting the definitions provided in statute since at least 1963, with the adoption of a Thoroughfare Plan and a Land Use Plan map, and revision of its land development regulations and official controls. The City has adopted multi-year capital improvements programs yearly for the past several decades, also.

The City adopted amendments and additional elements to its Comprehensive Plan over a period of years, including the following major elements:

1. **The Rochester Urban Service Area Land Use Plan incorporates general growth guidelines and includes policy statements, goals, standards, implementation measures and strategies, and a series of maps that extend beyond the municipal limits to include a 20-year service territory referred to as the “Rochester Urban Service Area.” This plan was adopted in 1980 and amended on several occasions since then, the most significant being the addition to the Urban Service Area of a fifty-year Urban Reserve Area and an expanded 25-year Urban Service Area in 1995 and again in 1999.**
2. **The Thoroughfare Plan text, which was adopted in 1977, includes policy statements, goals, standards, implementation measures and strategies, and a map, amended in subsequent years, and superseded by the Long Range Transportation Plan in 1997 (see below).**
3. **The Housing Plan includes policy statements, goals, and standards addressing affordable housing, the desirability of mixed use/mixed income neighborhoods, and implementation measures and strategies for meeting the need for affordable housing for various target groups within the community (adopted in 1980).**
4. **The Rochester Land Development Manual, which replaced the earlier separate zoning and subdivision ordinances, was adopted in 1992 and subsequently amended in 1999. It addresses policies related to land development and requirements for traffic impact reports, adequate public facilities, and so on. The public facilities section of the Land Development Manual explicitly addresses the standards and conditions under which the installation of private sewage treatment systems will be permitted, as follows:**

The use of private sewage disposal systems and private water supply to serve any new development shall not be permitted unless: 1) the Common Council has determined that public utilities will not be reasonably available and private utilities will not impair the ability to extend services in the future, and 2) the Olmsted County Health Department or County Sanitarian finds that proposed geologic and soil conditions, and lot sizes are adequate to support the proposed use of private utilities. There shall be adequate area to relocate the drain field in case of soil saturation for any lot authorized for on-site wastewater disposal.
5. **The Transportation Energy Policy Guide for Olmsted County and the City of Rochester was adopted in 1982 and superseded in 1997 with the adoption of the ROCOG Long Range Transportation Plan. It addresses transportation-related energy issues.**
6. **The Transit Development Plan, initially adopted in the early 1980s and updated in 1992, addresses short term and long term transit service operation, expansion, and funding for regular route and dial-a-ride services in the City of Rochester and its environs.**
7. **The Airport Master Plan initially adopted in the early 1970s and last updated in 1997, addresses short term and long term plans for operation and expansion of air transportation services and related land use and transportation impacts.**
8. **The Wastewater Master Plan initially developed in 1975 and comprehensively updated and expanded in 1995, addresses long term plans for collection and treatment of sewage in the Rochester Urban Service Area.**

9. The Plan for Acquisition of Public Lands, adopted in 1985 and updated in 2000, lays out a parkland classification system, policies for parkland acquisition for neighborhood and community parks, implementation strategies including dedication and purchase, and a (periodically updated) future acquisition priority list.
10. The Rochester Olmsted Council of Governments (ROCOG) Long Range Transportation Plan functions as an element of the plan because it is relied on in scheduling capital improvements and in reviewing and approving General Development Plans. The ROCOG plan includes elements addressing transit service, bikeways and pedestrian facilities, intermodal movements, livable communities, transportation funding, energy conservation, and streets and highways. Preservation and expansion of all transportation systems are addressed based on projected changes in land use and travel.
11. The Surface Water Management Plan functions as an element of the plan because it is relied on in scheduling capital improvements and in reviewing and approving general development plans. The Plan addresses storm water management and policies for retaining and improving surface water quality.
12. The Capital Improvements Program is prepared annually and provides a six-year program for infrastructure investments in all aspects of municipal business, including implementation of the Comprehensive Plan.

The City has also begun the process of adding two elements to its comprehensive plan establishing policies addressing (1) affordable housing and diversity and (2) environmental justice in capital improvements planning and programming.

It should be clear from the foregoing that the City of Rochester meets the letter and intent of both rule and statute. The following table summarizes the elements of the City's Comprehensive Plan.

<u>Plan or Plan Implementation Element</u>	<u>Date of Initial Adoption in Current Form</u>	<u>Date of Last Update</u>
<u>Rochester Urban Service Area Land Use Plan</u>	1980 (1963)	2000
<u>Thoroughfare Plan</u>	1977 (1963)	1997
<u>Housing Plan</u>	1980	1998
<u>Rochester Land Development Manual (incorporates Subdivision Ordinance and Zoning Ordinance)</u>	1992 (1930's)	2001
<u>Transportation Energy Policy Guide for Olmsted County and the City of Rochester</u>	1982	1997
<u>Transit Development Plan</u>	1992 (1983)	1997
<u>Airport Master Plan</u>	1965	1997
<u>Wastewater Master Plan</u>	1975	1995
<u>Plan for Acquisition of Public Lands</u>	1985	2000 (list only)
<u>Long Range Transportation Plan</u>	1997	1997
<u>Surface Water Management Plan</u>	1997	1997
<u>Capital Improvements Program</u>	Annual	2000

County Planning

Section 394.22, Subdivision 9, of Minnesota Statutes defines a “Comprehensive Plan” for county planning as follows:

“Comprehensive plan” means the policies, statements, goals, and interrelated plans for private and public land and water use, transportation, and community facilities including recommendations for plan execution, documented in texts, ordinances and maps which constitute the guide for the future development of the county or any portion of the county.

Olmsted County adopted the first element of its comprehensive plan with the adoption of the “Growth Guidelines for Olmsted County” in 1977. This document contained general policies and principles guiding public and private land development and related infrastructure in all of Olmsted County. The County has adopted multi-year capital improvements programs yearly for the past several decades, also.

The County adopted additional elements to its Comprehensive Plan over a period of years from 1977 to 1983, including the following elements:

1. The General Land Use Plan for the Olmsted County Area, including policy statements, goals, standards, a map identifying an “Agricultural Protection Area,” an “Agricultural Area,” a “Suburban Subdivision Area,” several “Urban Service Areas,” and incorporating the Growth Guidelines as refined and amended (adopted in 1978) and policies and strategies for plan implementation;
2. A Thoroughfare Plan, including policy statements, goals, standards, strategies for plan implementation, and a map (adopted in 1977 and amended in 1979); and
3. A Housing Plan, including policy statements, goals, and standards addressing affordable housing, the desirability of mixed use/mixed income neighborhoods, and strategies for plan implementation for meeting the need for affordable housing for various target groups within the community (adopted in 1980).
4. Detailed land use plans for those parts of the Urban Service Areas lying outside municipal limits, beginning with the Rochester Urban Service Area in 1980 and including all of the Urban Service Areas of the other cities in Olmsted County over the next few years, incorporating policies and strategies for plan implementation.

In 1983, Olmsted County adopted a comprehensive amendment to its zoning ordinance that:

- Restricted commercial and industrial development to Urban Service Areas and established a holding zone requiring connection to municipal water and sewer service for residential, commercial, and industrial development within those urban service areas;

- Restricted platted residential development to the limited area of the County identified as Suburban Development Areas;
- Restricted nonfarm development in most Agricultural Areas to a density of one lot per forty; and
- Restricted nonfarm development in most Agricultural Protection Areas to a density of one lot per quarter section (160 acres).

The Zoning Ordinance also sets other policies and requirements on land development that refine aspects of the land use plans.

The County has a number of policies and ordinances in place regulating private sewage collection and treatment and private water supply systems. County ordinances require that commercial, industrial, and multifamily residential development connect to municipal services if those services are available.

Olmsted County adopted a detailed Water Management Plan in 1991 incorporating a number of policies regarding water conservation and the preservation of surface and ground water quality in a number of urban, suburban, and rural settings. That Plan was amended in 1998.

The County revised its General Land Use Plan and implementation policies and strategies in 1995 with the adoption of a comprehensive amendment to the 1978 General Land Use Plan. The staff of the Environmental Quality Board (and others) have commended the plan for its strong growth management approach, its support for sustainable development, and for its innovative reliance on geographic information systems to guide the initial mapping of development and the evaluation of subsequent proposed map amendments.

The Long Range Transportation Plan prepared and adopted by the Rochester Olmsted Council of Governments in 1997, though not officially adopted as an element of the Olmsted County Comprehensive Plan, functions as an element of the plan because it is relied on in scheduling capital improvements and in reviewing and approving general development plans. The ROCOG plan includes elements addressing transit service, bikeways and pedestrian facilities, intermodal movements, and streets and highways.

The County has also begun the process of adding elements to its comprehensive plan establishing policies addressing affordable housing and diversity and environmental justice in capital improvements programming.

It should be clear from the foregoing that Olmsted County also meets the letter and intent of applicable rules and statutes in its land development planning and plan implementation measures. Accordingly, the City does not agree that the existing programs do not provide adequate mitigation. At the beginning of the AUAR process the EQB reviewed the completeness of our Comprehensive Plan elements and did not identify any gaps that would need to be addressed as part of the AUAR process. Further evidence of the comprehensiveness of local controls was provided in Table 2-8 of the AUAR. Thus, the

existing local regulatory framework, zoning processes, and other current mechanisms adequately address environmental impacts identified in the AUAR. Additionally, federal and state regulatory requirements further address mitigation needs.

Furthermore, while preparing the Hypothetical Development Scenario, the City prioritized constraints into three categories as they related to limiting development and the level of existing regulation to protect against unacceptable impacts. As part of this effort, the City recognized the opportunity to provide a higher level of mitigation beyond the existing regulatory framework and adopted additional environmental stewardship measures. Initially, it was conceived that these stewardship activities would apply only to low constraint features, however in the end, the City chose to apply these additional measures to all levels of constraint, regardless of existing regulations. Additionally, the City took the opportunity to provide a more detailed land cover map than is typically available from MnDNR. The stewardship measures identified in the AUAR include:

1. Educating the community at large on the benefits of environmental stewardship and sharing the AUAR resource data with landowners of undeveloped land.
2. Requiring the completion of an Environmental Review Checklist by developers to confirm understanding of the AUAR and to identify applicable mitigation measures, document consistency with the hypothetical development scenario, and raise awareness of stewardship opportunities.
3. Transferring data to provide stewardship information on natural and cultural resources in the AUAR project area to entities involved in the development process.
4. Updating the Parkland Acquisition Plan to identify areas appropriate for land acquisition.
5. Updating the Rochester USA Land Use Plan Map to delineate potential cultural resource sites and environmental corridors.

As a first step, the City has demonstrated their commitment to this stewardship process by hiring a GIS intern to facilitate the dissemination of information to landowners and developers and assist in the development tracking process once the AUAR is adopted.

Minnesota Department of Natural Resources

Environmental Review Checklist. “The City has identified a number of largely voluntary measures to mitigate the effects of development within the Study Area. An important component of this Mitigation Plan is the Environmental Review Checklist provided to developers. Consistent with Minn. Rules part 4410.3610, subp. 5B, we wish to be notified of the applications for specific projects that come forward in the Study Area. This can be accomplished by providing us with the Environmental Review Checklist submitted for each project. Please direct these notifications to the attention of Don Nelson, Regional Environmental Assessment Ecologist, in DNR’s Rochester Office at 2300 Silver Creek Road NE, Rochester MN, 55906. Mr. Nelson can be contacted by phone at (507) 281-7779.”

Staff Response: The MnDNR is currently a referral agency on all new development projects in the City of Rochester (not just the AUAR project area). As a result, the MnDNR is and will continue to be notified of proposed development projects. Information on proposed development projects will continue to be sent to the City's current referral contact, Russ Schultz, who is located in the Rochester office. We recommend that Don Nelson coordinate with Russ Schultz to participate in the process. In receiving these development referrals, the MnDNR has the opportunity to provide comments on any proposed development within the City of Rochester. Historically, the MnDNR has provided very few referral comments on natural resource issues.

Blanding's Turtle. "The Draft AUAR provides a very thorough job of presenting the threatened and endangered species information. The Mitigation Plan discussion of measures available to limit impacts to Blanding's turtle, *Emydoidea blandingii*, is acceptable but requires clarification. Specifically, the footnote found at the bottom of page 3-24 of the Mitigation Plan is incorrect. A portion of the Study Area (T106N R13W S ½ Section 4, NE ¼ Section 8, Section 9, E ½ Section 16, E ½ Section 21, Section 22, and Section 23) occurs within a potentially important area for Blanding's turtles. There are 14 such areas in the state, which are considered by the DNR to be priority areas for research and management activities, but for which important information on the size and health of the Blanding's turtle populations is lacking. Because this lack of information, the exact boundaries of the potentially important areas have not yet been determined. However, these areas are becoming increasingly indispensable for maintaining the species' security in the state due to the widespread development occurring statewide on Blanding's turtle habitat. The locations mentioned above are considered to be within an area of statewide importance to Blanding's turtles, thus the Final Mitigation Plan should apply the greater protective measures outlined in Table 3-3 for us[e] in this area."

"In addition, a second clarification is needed for the first recommendation listed in Table 3-2 under General Guidelines of page 3-23 of the Mitigation Plan. We recommend that the "*Protecting Blanding's Turtle Nests*" fact sheet be given to all developers and homeowners in the area, however this is not the flyer that contains an illustration of a Blanding's Turtle. The correct flyer has a "*Caution – Blanding's Turtle May Be Encountered In This Area*" statement and should be given to contractors working in this area."

Staff Response: The suggested modifications have been incorporated into a revised Section 2.3.5.1 (Endangered and Threatened Species) of the Mitigation Plan and its associated tables.

Part I, Section 4.1 - Natural Resources and Part II, Section 10-Cover Types

Helen Mitchell

"Please send her a copy of the section of AUAR on Blanding's Turtle and Blue Racer for Extension meeting."

Staff Response: The requested information has been sent.

Minnesota Department of Natural Resources

“In terms of potentially affected natural communities, the analysis relies upon data collected under the Minnesota County Biological Survey (MCBS). Although this is an accepted methodology, its application in this Draft AUAR does have an important limit. Specifically, the MCBS operates at a scale that is insufficient to fully inform future decisions on individual projects as to whether adverse impacts to locally significant, high value natural communities have been prevented. This is because the MCBS was a systematic, but not exhaustive, survey of Olmsted County. Areas less than 40 acres in size were typically not surveyed.”

“Furthermore, it should be recognized that the MCBS is designed to identify natural communities of *statewide* significance. It does so by employing high thresholds (e.g., size of occurrence; degree of disturbance; rarity) for a natural feature to meet in order to receive a designation of statewide significance. Given this designation protocol, is incorrect to assume that the absence of a MCBS feature means that an important natural community is not present at a specific site. Essentially, the MCBS design misses “small” features that could be locally valuable. This distinction is not academic because *locally* significant areas may still serve important ecosystem functions as connections between, or buffers around, other natural areas. Land use at the local level should use the thresholds of biodiversity for the local scale to determine if sites of oak forest, for example, merit special consideration in planning the development of an area. The recent discovery of valerian, *Valeriana edulis*, occurring within the Study Area near Rose Harbor Drive is an example of the limit associated with using the MCBS mapping to determine whether future development could adversely affect important natural communities.”

“Comparison of Tables 2-1 and 2-2, Existing (2001) and Hypothetical Development Scenario Land Use and Current Natural Community Land Cover, indicates that substantial *potential* is present for preserving and/or restoring high value natural communities in the Study Area even in the fully developed condition. However, this cannot be accomplished without site-level assessment of whether locally significant natural features are present for individual projects. As the Draft AUAR indicates **Part II, Section 6.4, Development Scenario**, “the future level of impact cannot be predicted at this time since specific development plans are not in place.” Given the lack of site-specific data, the AUAR should recognize that allowing development to proceed without additional field studies in areas known to be potential sites for native prairie or other natural communities fails to capitalize on opportunities that may be present to avoid, minimize, or even enhance these features.”

“The proposed mitigation plan provides a partial answer to anticipating and preventing potential development-related impacts to high value natural communities that may be present within the Study Area. Specifically, **Draft Mitigation Plan Section 2.2.3, Parkland**, states”:

“The mitigation plan will include:

- Dedicating parkland from each development proposal
- Considering dedication of natural resource features in lieu of neighborhood parks and recreation fields as a future parkland dedication option.”

“Given that each project will require parkland dedication that “is evaluated on a plat by plat basis,” the Final Mitigation Plan should require a site-specific assessment for potential high value natural

communities [as the term is applied in the *County Plan*], including remnants, for projects to be in compliance with the parkland dedication provision. This assessment need not be overly cumbersome, but should reflect consultation with a professional botanist, arborist, or forester. Because the Mitigation Plan is designed to support future permits and approvals, it is reasonable for the Draft AUAR's Figure 1-4, Natural Resource Inventory, to provide initial guidance on scoping these assessments. However, each site should undergo the survey regardless of what Figure 1-4 depicts."

"In considering whether requiring site surveys for high natural communities should be adopted as mitigation applied to future development, it is valuable to note the role intended for adopted Mitigation Plan in overseeing projects to come. The Environmental Quality Board (EQB) has offered guidance on how the Mitigation Plan should control the impacts of the future development in the Study Area. The EQB publication *Guide to the Minnesota Environmental Review Rules* (1998) specifically states:

"The Mitigation Plan is not merely a list of ways to avoid significant environmental effects, rather an action plan on how the effects will be avoided. It is commitment by the RGU (Responsible Governmental Unit) and other agencies to take action to prevent impacts that otherwise could occur from project development." (Page 16, original emphasis)

"We believe including a site-survey provision for high value natural communities is consistent with EQB's guidance. Having this information collected and considered during the platting process is necessary for the parkland dedication provision to function properly. This measure could be applied in the Environmental Review Checklist that will be instituted for use by developers as part of the General Development Plan review process."

Staff Response: Local entities rely heavily on MnDNR Natural Heritage information (MCBS, threatened and endangered species information, etc.) for planning purposes. In fact, except for wooded areas (in other words, for high value prairies and wetlands), the threshold for identifying sites in Olmsted County was less than 40 acres, resulting in identification of a number of fairly small sand prairies, fens, and hillside seep sites. In this area, however, Rochester's Committee on Urban Design and Environment (CUDE) recognized the limitations of the MnDNR data and decided to compile additional information for this developing area as a pilot project by conducting infrared photography analysis to map natural communities. The interpretation provided by CUDE was targeted to a local scale, specifically to identify potentially significant remnant natural communities of any size in the Bear Creek area that were missed by the MCBS. (It should be noted that Ann Pierce, an ecologist with the MnDNR, is a member of CUDE.) The CUDE information and MnDNR Natural Heritage coverage were both incorporated in Figure 1-4 Natural Resource Inventory and the AUAR evaluations. The Minnesota Land Cover Classification System (MLCCS) is currently being utilized to map all of Olmsted County (including the project area), but these maps are incomplete and not as detailed as the CUDE information at this time. The next step for the MLCCS mapping is for the MnDNR to complete a more detailed classification of natural community types based on the information compiled to date. The City will consider the MLCCS data in future AUAR updates as it becomes available.

As a point of clarification, the recent discovery of valerian, *Valeriana edulis*, was not within the AUAR project area. The valerian was identified in Rose Harbor, a developed neighborhood outside of the project area in two small undeveloped lots that are isolated by surrounding development in a steep slope hillside seep along the edge of an area already approved for development.

Regarding a comparison of Tables 2-1 and 2-2, it is important to recognize that several of the land cover classifications in Table 2-2 overlap with each other, resulting in acreages that are artificially high. Some of these areas (such as those occurring within floodplains, on steep slopes, or within wetlands) that remain because they were not desirable for agriculture or development will continue to be avoided due to current regulatory or zoning requirements. Many of the remaining areas have already been disturbed by agriculture or other usage. Also, the size, viability, and integrity of natural communities, along with their connectivity, are important when considering stewardship options. The primary goal of the stewardship measures identified in the AUAR is to promote the protection of quality remnant natural communities by providing information to landowners and developers and updating parkland acquisition plans and land use plan maps with natural community preservation as the focal point.

The EQB's guidance clearly provides for completing site-surveys in cases where rare species and communities of plants and animals are expected. In this case, prior consultation with the MnDNR Natural Heritage program for information about reports of rare plant and animal species in the project area was conducted. The City purchased the Natural Heritage database for the area. An evaluation of the Natural Heritage database in conjunction with the MCBS and CUDE land cover types (more detailed than those typically provided by the MnDNR) did not indicate the likelihood of finding rare species such that further site-surveys were warranted. The City would like to point out that in our experience, even at the more project-specific EAW scale, site-specific biological surveys are not commonly required unless there is the potential for a sensitive natural community being present, as are typically identified using MnDNR data.

The City, as the local land use planning authority, needs to bear in mind the legal necessity of providing equitable requirements for all developers in every part of the City. Requiring surveys in the AUAR area only, would result in unacceptable inequitable requirements. The Environmental Review Checklist and other stewardship measures are meant to address the natural resource issues in a more equitable manner.

The City would also like to note that state statutes clearly indicate that local planning authority resides with local government, as follows:

462.351 Municipal planning and development; statement of policy.

The legislature finds that municipalities are faced with mounting problems in providing means of guiding future development of land so as to insure a safer, more pleasant and more economical environment for residential, commercial, industrial and public activities, to preserve agricultural and other open lands, and to promote the public health, safety, and general welfare. Municipalities can prepare for

anticipated changes and by such preparations bring about significant savings in both private and public expenditures. Municipal planning, by providing public guides to future municipal action, enables other public and private agencies to plan their activities in harmony with the municipality's plans. Municipal planning will assist in developing lands more wisely to serve citizens more effectively, will make the provision of public services less costly, and will achieve a more secure tax base. It is the purpose of sections 462.351 to 462.364 to provide municipalities, in a single body of law, with the necessary powers and a uniform procedure for adequately conducting and implementing municipal planning.

462.353 Authority to plan.

Subdivision 1. General authority. A municipality may carry on comprehensive municipal planning activities for guiding the future development and improvement of the municipality and may prepare, adopt and amend a comprehensive municipal plan and implement such plan by ordinance and other official actions in accordance with the provisions of sections 462.351 to 462.364.

As the local authority, it is up to the City to determine if it wishes to preserve natural communities beyond those of statewide significance. In evaluating the community value of remnant natural communities, the City must balance environmental preservation with the other socio-economic factors it has a duty to address.

Regarding parkland, although they are also important tools, it is not at the level of the Land Use Plan or the Parkland Acquisition Plan that most quality remnant communities will be identified and preserved. Instead, that will most likely occur during the process of General Development Plan (GDP) review and plat review. Since many of these sites will have limited value for active recreation and will have significant development constraints, their preservation will occur through the implementation of existing public policies addressing protection of sensitive habitat and avoidance of sensitive areas. Those policies are already in the Land Use Plan and are applied City-wide. Agencies with a concern about GDPs are invited to comment on all development applications through the referral process.

By providing information under the stewardship plan, the City will raise the level of awareness regarding natural communities. Developers will be encouraged to protect areas as marketable amenities and landowners who do not plan to develop their land will be made aware of potential stewardship opportunities. At that time, a qualified natural resource professional could be retained to facilitate this process by conducting a site survey, if warranted. Thus, areas that may undergo development and those that landowners have no plans to change will benefit from the AUAR information.

Please refer to the Park, Trails, Natural Resource/Open Space Preservation discussion below regarding parkland dedication.

Please refer to Part II, Section 11-Fish, Wildlife, and Ecologically Sensitive Resources comments and responses regarding Monarch butterfly habitat.

Part II, Section 6.8 - Parks, Trails, Natural Resource/Open Space Preservation

Minnesota Department of Natural Resources

“Parkland dedication is an important aspect of the City’s plan for future development in the Study Area. The City of Rochester is to be commended for encouraging the acquisition of land for future park development, including natural resource-based parks. We wish to offer the following points on this topic:

- Joyce Park – This park already exists as a protected natural area; it exhibits seeps and springs and should be retained in its current state. Unless the City is planning on expanding this park to the east, which is not indicated on the Draft AUAR, then this park should not be counted toward meeting Parkland Dedication Ordinance requirements.
- Regarding the locations of the two proposed future parks on the extreme western edge of the Study Area, having both facilities located this way does not adequately serve the passive and active recreation needs of the development to come. It also does not capitalize on the ability of the parkland ordinance to be used to protect sensitive resources under the passive recreation ordinance. The Mitigation Plan should include a provision to identify significant sensitive areas that cannot be developed and have those areas designated as passive recreation areas, or simply as natural resource set aside areas.
- Regarding the Parkland Acquisition Plan, we suggest the timetable for updating be accelerated from the current five year timeline. This can be an important tool for protecting natural areas within the project area in a systematic manner rather than relying on such decisions on a project-by-project basis.”

Staff Response: The parkland dedication provisions in the Rochester Code of Ordinances would not apply to Joyce Park since it is not part of a development plan. This park will be retained, but not expanded under current plans. The other parks identified in the AUAR are the only ones identified for acquisition at this time, but additional areas will be considered as part of the planned Parkland Acquisition Plan update.

The City does not have a “passive recreation ordinance” as implied above. However, provision for certain types of passive recreational areas are addressed through the Parkland Acquisition Plan.

The parkland dedication provisions only provide for neighborhood parks related to residential development plans. The City does not see that changes in parkland dedication provisions would be the appropriate mechanism to protect natural areas. Rather, the addition of natural areas to the park system can better be addressed through the Parkland Acquisition Plan. The Parkland Acquisition Plan is the larger scale policy issue for the entire City that is referenced in the AUAR to undergo an update and will include natural resource preservation and passive recreation opportunities within the AUAR project area. The natural resource inventory completed as part of the AUAR will be provided to the Park and Planning Departments for use in identifying potential environmental corridors and in developing criteria for natural resource parcel acquisitions.

The Rochester Park and Recreation Department has committed to completing the Parkland Acquisition Plan by spring 2005. It should be kept in mind that parkland dedication and parkland acquisition only applies to public ownership of open spaces and that the identification of out lots, easements, private open space, and other types of non-park open space are frequently of great importance in preserving sensitive habitats.

Since the draft AUAR was published the City has acquired 80 contiguous acres of parkland in the study area that will further connect natural communities. This recent acquisition includes areas of grassland, prairie, and shrubland abutting Bear Creek.

Part II, Section 11 - Fish, Wildlife, and Ecologically Sensitive Resources

Minnesota Department of Natural Resources

“Bear Creek and Badger Run are correctly identified as major environmental corridors within the Study Area. The Final Mitigation Plan in *Section 2.3.1* should require that consideration be given to the feasibility of siting sewer lines along edges of fields and not routed through wooded areas. In addition, the Final Mitigation Plan should indicate that stream crossing be accomplished by directional boring, especially in relatively undisturbed areas.”

“Regarding Badger Run as characterized in **Part II, Section 11.a.1.2.4**, an initial stream survey of this water body was conducted by DNR in 1995. The stream is not a recreational fishing stream, and has been substantially affected by agricultural land use and urban encroachment.”

“Item 11.a.2.8 should indicate that development in the Study Area will essentially convert the current mix of natural and agricultural (i.e., agriculture) landscapes to a more suburban-type habitat mix. The wildlife present under the future conditions will accordingly change to those species more tolerant of human activity and the suburban landscape.”

“Item 11.b.1 correctly identifies the remnant prairies located in the Rose Harbor Drive area, and across from Eastwood golf course, as being present but does not recognize them as high biodiversity areas. The Rose Harbor Drive area is in fact a nice prairie remnant that exhibits high diversity of species. Although the two small plots across from the golf course do not include any state-listed species to our knowledge, they merit higher priority because this area is a known stopover location for the migrating monarch butterflies. Large numbers of butterflies have been observed in both remnants. Destruction of these remnants would result in the loss of two important migration stopover sites for this butterfly species.”

Staff Response: The City acknowledges the information regarding Bear Creek and Badger Run provided above.

The potential future sewer line routes identified in the AUAR are for preliminary planning purposes only. The City will consider various alignment alternatives and their relative socio-economic and environmental impacts as part of the design and construction process. For any required stream crossings, it is the standard practice of the City to obtain the appropriate permits and abide by the required permit conditions and other regulatory guidelines for construction activities and restoration methods. In other words, appropriate

mitigation is provided both during and after construction. Regarding alternative construction methods, the City does consider its construction options along with other socio-economic and environmental considerations as part of the feasibility study process that precedes construction planning and design.

Regarding “Item 11.a.2.8,” [Note: this reference should have been 11.a.1.8] The City acknowledges that development in the project area will convert the current mix of natural and agricultural landscapes to a more suburban-type habitat mix and that the wildlife under the future condition will accordingly change to those species more tolerant of human activity. Verbiage in 11.a.1 states: “There is a variety of wildlife in the AUAR project area due to the diverse types of habitat available. Wetlands, woodlands, grasslands, and croplands found in the areas provide good cover and habitat for many common species found in the upper Midwest. Development will result in an overall loss of habitat quantity and quality in the area. In the short term, animals will be displaced by construction activities, moving into other areas where they will be forced to compete for resources and typically experience higher rates of mortality than resident wildlife. In the long term, the ability of the area to support wildlife will be diminished. The frequency of conflicts between humans and wild life will increase in the form of nuisance wildlife complaints.”

Habitat connectivity in the project area is not necessarily lost as a result of development due to regulations protecting floodplains, steep slopes, and wetlands. Habitats will likely be transformed in other instances from one type of habitat to another, with a subsequent change in wildlife diversity. To compensate to some degree for the loss of native habitat from construction, the City will continue to use native plants and MnDNR-recommended seed mixes where required and consider them when not required as part of the restoration process for public construction projects.

Regarding “Item 11.b.1” referenced in your letter, the City has already brought this information to the attention of the developer’s agent for the affected property. The director of the local nature center, who is also a Monarch butterfly expert, specifically made a site visit with the developer’s agent to identify the locations of the habitat and evaluate the quality of the monarch migration sites. As a result of these efforts, the developers have expressed their intent to revise the concept plans to maintain these areas as a focal point of the development on a voluntary basis.

Part II, Section 21 - Traffic

Jim Baier – Marion Township Supervisor

Appendix B: “The traffic count was done in July 2001, at the time of year it would not have shown the additional traffic associated with the schools in and near the study area. Some of those schools are Mayo High School, Willow Creek Middle School, Pinewood Elementary, Longfellow, Faith Christian, Victory Christian, RCTC, and UCR. The added traffic of students, staff, and support would certainly be a factor in any concise traffic study. Additionally, the traffic count at 20th Street and Marion Road

intersection was flawed because at that time last year the road was barricaded as the sewer project was taking place. The 1998 traffic count was before the upgrade of Marion Road. Much of the traffic generated near 50th Avenue that would have used 20th Street was probably using 50th to Highway 14. That intersection was not counted.”

“Problems at 40th and 14 will intensify as current development builds in, MNDOT has stated that if traffic reaches an unacceptable level they will close the median until such time as 14 upgrades to four lane to the east. That would make the 40th south to 20th absolutely necessary. Eastwood Road is already a concern and should not have any additional traffic dumped on it. The worst intersections are the 40th/Highway 14, Eastwood Road/Marion Road and are the most difficult to resolve.”

“Under 4.3, those roads label as partial responsibilities are in the OAA boundaries and I believe that Marion Township should have no additional responsibilities for acquiring any additional ROW, etc.”

Staff Response: Appendix B: The traffic study conducted as part of the AUAR consisted of two analyses, one which looked at key intersections and a second which looked at corridor level capacity needs in the study area. The corridor level analysis utilized average daily traffic volumes to determine capacity needs, relying on MnDOT State Aid Count Maps volumes from 1998 which were adjusted based on observed traffic growth rates to represent a reasonable estimate of Year 2001 traffic. The counts for this particular analysis were not taken during the summer of 2001 and given the methodology used in developing the State Aid Count Maps should reasonably reflect traffic of the educational institutions and normal, non-construction conditions in the area.

The analysis that looked at intersection operations did rely on the traffic data collected in July of 2001, as this analysis requires data for individual turning movements that is not gathered as part of preparing the State Aid Count Maps. This analysis relied on the standard protocol for intersection analysis, which is to evaluate the highest volume periods of the day. These periods are the AM and PM peak hours of 7-8 AM and 5-6 PM, which are periods influenced heavily by trips to and from work or other after work/after school trips. While traffic associated with schools can cause traffic peaking for 15 or 20 minutes, this typically occurs during non-peak hours when general traffic levels are lower than in the peak hour, and as a result the hours of maximum school traffic are not the highest volume periods of a typical day. It should also be noted that in comparing the AM and PM peak hours, the PM peak hour normally will have the highest volumes, as was found in this study where the PM peak hour traffic in the study area was approximately 25% higher than the AM peak hour and thus represents, for analysis purposes, the worst case scenario.

More specifically, in the Rochester School District, elementary schools start at approximately 9:15 AM and end at 3:35 PM, well outside of the peak traffic hours. Rochester Middle Schools and High Schools end their school day at 2:30 and 3:05 PM, respectively, again well outside of the afternoon peak hour of street traffic. While Willow Creek Middle School and Mayo High School do start between 7:00 and 8:00 AM, the overall level of traffic in the morning peak hour is about 25% lower than in the PM peak hour and that, combined with the fact that a significant share of the attendance area population supporting these schools is from areas to the northwest and west of these schools (thus not impacting study area streets), results in traffic flows that would be below the PM peak hour. In addition, traffic into the schools in the morning would not be as critical in

terms of intersection operations since most of this traffic is turning off of the public street and into the school site, which is not as critical as movements out of the site which are typically the highest in the afternoon.

The Rochester University Center and Riverland Technical College have hourly traffic peaks that coincide more closely with the normal peak hour of traffic on area streets. The data that was collected for the AUAR project in July of 2001 was compared with data from the spring of 2000 when these schools were in session to determine whether the July 2001 was representative of traffic volumes during the school year. It was found that counts generally were within 2% for the AM peak hour and within 5-9% of PM peak hour counts. We believe this is explained by the fact that while school traffic in the area is minimal in the summer, it is offset by other types of traffic, such as recreational traffic associated with facilities at MacQuillan Field, the athletic fields at the University Center, and Eastwood Golf Course, and also by the overall higher level of travel normally observed in the summer months in general. The counts utilized in the study for the intersection analysis were representative of traffic generally observed in the study area.

The comment regarding traffic at the intersection of 20th St and Marion Road does identify what appears to have been an undercount of traffic as a result of the sewer construction project noted in the comment. Further analysis has been conducted of this intersection based on revised traffic estimates which were prepared by factoring the observed 20th St turning movement counts to a level corresponding with non-construction levels of traffic 20th St. Based on this re-analysis, the following level of service (LOS) results were found:

AM PEAK HOUR

EAST APPROACH		NORTH APPROACH		SOUTH APPROACH	
LEFT	RIGHT	THRU	LEFT	THRU	RIGHT

2001 BASE YEAR

Original Analysis	B	B	n.a.	A	n.a.	n.a.
Revised Analysis	B	B	n.a.	A	n.a.	n.a.

2025 Development

Original Analysis	D	B	n.a.	A	n.a.	n.a.
Revised Analysis	D	E	n.a.	B	n.a.	n.a.
With channelization	D	D	n.a.	B	n.a.	n.a.

PM PEAK HOUR

EAST APPROACH		NORTH APPROACH		SOUTH APPROACH	
LEFT	RIGHT	THRU	LEFT	THRU	RIGHT

2001 BASE YEAR

Original Analysis	B	A	n.a.	A	n.a.	n.a.
Revised Analysis	B	A	n.a.	A	n.a.	n.a.

2025 Development

Original Analysis	D	B	n.a.	A	n.a.	n.a.
Revised Analysis	F	B	n.a.	A	n.a.	n.a.
With channelization	F	B	n.a.	A	n.a.	n.a.

The results of the re-analysis illustrate that with the revised traffic volumes the LOS at 20th St SE and Marion Road under current traffic conditions [unsignalized intersection with side street (20th St) Stop conditions] still meets criteria, but that westbound left turns drop to a LOS F for the PM peak hour and a LOS E for westbound right turns in the AM peak hour occurs under projected future traffic conditions with full development. The intersection was further analyzed using the Intersection Capacity Utilization methodology (ICU) as well as the Highway Capacity Manual – Signalized Intersection Planning methodology (HCM) to determine if the intersection would operate adequately under 2025 conditions with a traffic signal installed. Both the ICU and HCM indicate that the intersection under current lane geometry would operate at a Level of Service C with adequate capacity under 2025 conditions if a traffic signal is installed in the future when warrants were met.

The results of this analysis suggest that traffic volumes at 20th St and Marion Road should be monitored as recommended in the Mitigation Plan and in Appendix B of the AUAR to determine when in the future traffic signal would be warranted. Current operational conditions are adequate, but as development occurs and traffic grows there is likely to be a point in time when signalization will be warranted. From a signal spacing standpoint, the intersection of 20th St is approximately 4065' feet south of the current signalized intersection at Park Lane, which exceeds signal spacing criteria for a roadway such as Marion Road which is functionally classified as a Minor Arterial. The next likely location for a signal, at 40th Ave SE, is located 1.25 miles from 20th St, which again would provide adequate spacing between signals if one should be warranted at 40th Ave.

The commentator notes the intersections of 40th Ave with TH 14 and Eastwood Road with Marion Road already exhibit some traffic congestion and safety concerns. New traffic as a result of development in the study area will add to these concerns. The AUAR recommended monitoring on a regular basis to track traffic changes at these critical locations in order to identify when consideration of improvements should proceed. Options in addition to closure of medians, such as restricting certain turn movements through the intersection of TH 14 and 40th Ave should be considered. Further consideration should be given to completing traffic impact studies prior to any new development specifically impacting these intersections to determine if adequate capacity exists.

Roadway jurisdiction noted in Section 4.3 reflects current ownership of the roads listed. It is expected that following the completion of the AUAR process, development in the project area would occur only with annexation and transfer of road ownership to the City of Rochester. Thus, questions about additional right of way and improvements are likely to be the responsibility of the City in the project area whenever the need is generated by new urban development.

Other Comments

Donald and Virginia Van Keulen

“According to the current plans this catch basin [BC-p2.1.16a] is located in our front yard on our property. We do not want it on our property. A new location needs to be found.”

Staff Response: The location of the stormwater drainage features, as well as other infrastructure and planning information included in the AUAR, are for preliminary planning purposes. Preliminary design and the evaluation of feasible location alternatives will occur as development projects move forward. The City has clarified that these locations are only for preliminary planning purposes with Mr. Van Keulin.

Brian and Konnie Smith

“We own 72 acres of land that is located at the east end of Eastwood Road, SE. This land has been subdivided into two parcels. One parcel is approximately 8.5 acres that is around our home. The remaining 63.5 acres is a mix of tilled farmland (48 acres) and woods/hills (15 acres). We hope to continue to farm and enjoy this land for the next 10 to 15 years in its current state. After that, truthfully, we then want to develop the land within the R-Sa zoning which we see as permissible within this proposal.”

“One of our current problems that we have raised with both the County Planning Commission and Rochester City Planning Commission is a water runoff problem with the Valley View development. We have had only one meeting with Dave Bell of Moore Realty and while we have discussed some solutions, we have not come to any agreements. We have an immediate need to lessen the impact of not only the current development in this area but future including the approximately 40 acres to the east of the Valley View development and any and all development on the Thein’s property which is mostly uphill from ours.”

“To this end, we would like to work with you, our neighbors, and the developers of surrounding land towards a common goal.”

“1) Specifically in regards to the water runoff problems with current (and future) developments and our land could you recommend a person that can help us develop a surface water runoff option to lessen the problem?”

“Currently we have requested of Dave Bell that his business dredge the current retention pond found on the north side of the Valley View development as this has silted in due to all the new construction in the area. As of today, this has not happened.”

“In addition, we see the need to provide a means to control the excess water runoff. It is here we need your help. Short term ‘solutions’ such as new developments paying to fund into a fund does not help us now. But, bringing long term solutions to the now would be acceptable and we would work with you and developers to this end.”

“2) Can you put us in touch with the developer that is interested in developing Thein’s property?”

“3) In regards to Figure 2-5: the proposed stormwater line that runs north-south between our land and Theins runs through an old cow path. This cow path has wooded over [,] over the years. We would like to preserve this strip as a barrier both to new construction on Their’s property and water and wind erosion.”

“As a proposed solution it would seem better to follow the current drainage ditch that runs between the current water retention pond on the south side of Valley View development through Their’s property. This parallels Eastwood Road SE and then turns south to parallel the lot line between us and Their.”

“4) In regards to Figure 2-5: the proposed pond located in the south east corner of the Valley View subdivision seems to be in a different place than it is now. Is the current pond being moved or changed in any way as part of this proposal?”

“5) In a previous proposed GDP for the 40 acres of Their’s property just south of the current Valley View development a larger detention pond was proposed along with a park and the elimination of the eastmost section of Eastwood Road SE. What has happened to the line of thinking? From the proposal seen in Figure 2-5 we see that it has changed, but we want to be sure.”

“6) We would like to discuss with you the placement of the sewer, stormwater, water, ponds, and other services and necessary easements across our property. Please give us a call to arrange a meeting.”

“7) In regards to Figure 1-7: Could you give us more information as to the nature of the ‘Potential Historical/Archaeological Site’ that appears on our property? This appears fairly close to the property line between us and the Ganske’s to our north. This is the first time we have seen this.”

“8) We would like to see some ideas regarding the growth and extension of bike paths in our area. Specifically a goal should be to extend the existing bike paths between us and the intersection of TH 14 and Marion Road.”

Staff Response: The development of the land as large lots within the R-1 zoning district (equivalent in character to R-Sa zoning that is applied to existing developments) is consistent with the AUAR development scenario.

Items 1, 4, and 5. The Valley Side Estates (referred to as Valley View in the letter) development includes a permanent on-site pond at the existing location that is designed to limit the 2-year, 10-year, and 100-year peak stormwater discharges to the same or less than pre-developed conditions, and are designed to meet the water quality requirements in Appendix B paragraph C.2.a in the MPCA’s NPDES permit R110000. Plans include an additional pond southeast of the existing pond to serve the next phase of development on the east side of Valley Side Estates. No official GDP for the 40 acres south of Valley Side Estates has been submitted. This developer has not proposed to pay into a fund for storm water management. Instead, they have constructed a pond to address storm water management for their site.

Permit R110000 as discussed above requires the Valley Side Estates owner to remove construction sediment from the pond when sediment reaches one-half of the storage volume.

After a May 16, 2002 on-site meeting with the property owner, the City notified the Valley Side Estates developer of the neighbor's concerns via e-mail on May 17th and by phone on May 22nd. The developer has informed the City that the sediment will be removed by the end of May 2002.

Item 2. The property owner has been given the contact information for the property in question.

Items 3 and 6. Proposed public infrastructure locations shown in the AUAR are for preliminary planning purposes. The locations will be finalized during the design and development phases of future public projects and will take into account the considerations outlined in the comment letter and during the on-site visit. The City confirmed during the May 16, 2002 on-site meeting with the property owner, that it will work with the property owner on future sewer and other infrastructure alignment issues as the property owner develops a conceptual layout for development.

Item 7. Because the driveway was a private road with no approved access at the time of the inventory, the location was marked as not evaluated due to lack of access. City staff confirmed from a site visit that only new buildings exist at this location so there are no sites with potential historical/architectural significance at this location. Figure 1-7 has incorporated two other clarifications at other locations that are shown on the revised Figure 1-7.

Item 8. The Rochester-Olmsted Council of Governments (ROCOG) Long-Range Bicycle Plan (September 1999) recognizes an existing bike trail on the easternmost end of Eastwood Road and the need for Neighborhood Connector trails on the remainder of Eastwood Road (all the way west to Marion Road). Marion Road (between Eastwood Rd. and TH 14) is shown as a future bike path. Similarly, the ROCOG Pedestrian Facility Plan recognizes the need for a Pedestrian Facility along Eastwood Road to serve fringe/suburban growth. The designation of "neighborhood connectors" indicates a separate path from roadways that are expected to be funded as future development occurs.

Kathy and Gary Gunderson

"We purchased this property to build our retirement home on. Now, the sewer going through will pull trees, then [the] 40th [Ave. road extension] going through will take all [the] land."

Staff Response: Physical limitations to construction in the area, such as steep grades and the creek, may impact the feasibility of project location alternatives and/or project implementation. The feasibility of and final alignment for the potential sewer and road extensions have not been determined, so their actual impact on the Gunderson property cannot be determined at this time. At such time as preliminary plans for these proposed projects materialize, landowners will be contacted.

The Gunderson parcel is included in the Orderly Annexation Area. Therefore, if sewer and water service is available to the property at the time a future home is built, it must utilize City sewer and water.

Kristen Walton-Kimball

“I have attended two of the AUAR meetings. I would like to express my concern about the project and let it be known that I do not want city water and sewer at my residence. I cannot afford the expense to hook up to the services (even if incentives are offered). My parents just hooked up to the water and sewer on 25th Avenue SE Rochester and the projected price of \$18,000 was well exceeded. Adding a monthly bill for water and sewer would also add to the hardship. I’m also not interested in being incorporated into the City of Rochester. Being incorporated leads to higher taxes, again, something I cannot afford. My well and septic are in fine working order at this time and I feel that repairing or replacing either would be less of a financial burden than hooking up to city water and sewer.”

Staff Response: This environmental review process was not intended to address sewer connections or annexation issues per se. An AUAR is a type of environmental review used to assess potential cumulative environmental impacts of future urban development over a broad geographic area that may encompass several projects. The more traditional Environmental Assessment Worksheet (EAW) method focuses on smaller-scale, project-specific assessments. The AUAR process includes the preparation of a “Mitigation Plan” that identifies methods to avoid, minimize, or mitigate identified environmental impacts that may have independent or cumulative effects as future development takes place.

The comment that sewer and water connection costs well exceeded the projected price of \$18,000 is not accurate. Without the Water Quality Protection Program (WQPP), the normal charge for the Arlan and Kaye Walton residence would have been \$29,149.20. Under the WQPP, Arlan and Kay Walton (2639 25th Ave. SE) voluntarily signed a Utility Connection Agreement to pay \$18,070 to the City for their sewer and water connection, and the City paid \$11,079.20. Additionally, the work that was needed on private property for the connections totaled \$3,715, of which the City paid \$3,500 and the Walton’s paid \$215. Therefore, the Walton total was \$18,285 (\$18,070 + \$215), while the City total was \$14,579.20. These totals do not include any additional expenditures that the homeowner may have incurred to accommodate connections or changes within the home.

Your lot in the Homewood Addition is not currently in any of the Orderly Annexation Areas (i.e., this subdivision has not petitioned for sewer extension). In order for existing neighborhoods that are not already covered by the orderly annexation agreements to receive sanitary sewer, the following steps must first occur:

- 1. The subdivision residents petition the City for sewer service.**
- 2. A study is conducted to determine if it is economically and physically feasible for the sewer extension to be constructed.**
- 3. The City Council holds a public hearing about the feasibility report and the citizen petition.**
- 4. If the construction is feasible and the Council approves the petition, then the City and the Township must enter into an annexation agreement.**

5. Before connections to individual homes can be made, connection agreements must be executed between the homeowner and the City.

In summary, it is the joint, majority request of all the residents within a subdivision that determines whether or not sewer and water services are offered to a subdivision that currently utilizes private septic systems and wells.

Joel Kimball

“I will do whatever it takes to stop this project from encroaching on the Township of Marion. I will start a petition and if need be a class action lawsuit to stop the City of Rochester from expanding into this area. There is only one reason the city is interested in running this sewer project and that is to annex this area. Basically, this is nothing but a big land grab that smells of GREED. There is no there reason the city would otherwise be interested in this area except to make everyone pay for something they don’t want. I like my water ...it tastes and is much cleaner than anything you can deliver and I don’t trust public utilities to keep my water safe.... especially now with all the lunatics running around ... how are you going to protect all the water supplies from being poisoned. I have worked for a water department and I have seen things that made me sick, from rats to weed killer, contaminating the water and everything was covered up and the landowners were never notified. If this is something YOU feel strongly about putting through then you should be paying us to give up our safe water and septic tanks. This is totally ridiculous to think that people have \$30,000 to pay to hook up to your system and then have to pay for the right to drink the water on top of that ... THAT IS NUTS..... you want us on your system ... then you pay us to hook up and don’t charge us a dime for the water we will be getting, otherwise FORGET IT ... turn around and go the other way ... and leave the open land out here alone.

Staff Response: Please refer to the previous response to the Kristen Walton-Kimball comment letter. The extension of sewer and water into subdivisions in Marion Township has been a response to property owner petitions. Homewood Addition has not petitioned for a project to serve Elm Lane, nor is the neighborhood in any of the Orderly Annexation Agreement areas.

The comment about people paying \$30,000 to hook up to the City systems is not accurate. The maximum amount a property owner of a developed residential lot pays the City for sanitary sewer and water main under the WQPP, if the lot is in a neighborhood that petitioned by July 31, 1999, is as follows:

- **Sanitary Sewer and Water Main Connection Charge - \$16,320.00: Maximum 1-½ acre charge**
- **Sewer Availability Charge - \$ 750.00: ½ acre charge (City pays first one acre)**
- **½ acre Water Availability Charge - \$ 1,000.00: ½ acre charge (City pays first one acre)**
- **Maximum WQPP Charge for Developed Residential Lot - \$18,070.00: If petitioned by July 31, 1999**

There is an automatic increase on August 1st of each year based on the Engineering News Record Construction Cost Index as measured in the Minneapolis/St. Paul Area during the previous 12 months. The increases since July 31, 1999, are as follows:

- **August 1, 1999 - 7.1% (January 1998 to July 1999)**
- **August 1, 2000 - 3.0%**
- **August 1, 2001 - 3.4%**

Therefore, the maximum amount that a property owner of a developed residential lot pays to the City for sanitary sewer and water main under the WQPP rates in effect until July 31, 2002, is \$20,611.30.

Zumbro Land Conservancy Board

“The Zumbro Land Conservancy (ZLC) board commends the City of Rochester for doing the Alternative Urban Areawide Review (AUAR) for northwest Marion Township. The AUAR is a much better process for environmental review than the previous, piecemeal assessments as it covers a much larger area and provides a more comprehensive and holistic approach to environmental review and mitigation. The AUAR encourages broad citizen participation resulting in a document that reflects the views of many segments of our community. The AUAR also helps developers, allowing them to identify potential environmental concerns prior to purchasing or developing a property. For these and other reasons, we strongly encourage the City to do AUARs for other significant areas of urban growth.”

Staff Response: Thank you for your support of the AUAR process.

David and Jamie Edwards – Dan and Jodi Stevens

- 1) “Provide evidence of cost effective analysis of alternative locations for running the Bear Creek and Badger Run sub-trunks – including addressing why the Bear Creek sub-trunk cannot be serviced from above rather than below.”
- 2) “Add the missing elements to the NRI map including the state-threatened valerian (*Valeriana edulis*) located in the Rose Harbor area and move the Blanding’s turtle (*Emydoidea blandingii*) into the AUAR project area located on Highway 11.”
- 3) “Include in the AUAR wording that recognizes the Natural Heritage Inventory Data obtained from the DNR does not represent an exhaustive survey of the entire AUAR project area. We also request that references to the occurrence of listed and sensitive species and habitats be changed so as to imply that just because none are known to occur in the project area that it means absolutely none occur (again makes reference to misleading the reader that an exhaustive inventory of the project area has been conducted).”
- 4) “The City needs to identify additional future parks within the AUAR project area. The two identified do not adequately address the needs of the entire project area and its future residents.”

- 5) “We request the City accelerate its plan to revise its Parkland Dedication Ordinance to allow for more passive recreation areas or simply natural resource/environmental corridor areas. This includes making passive recreation and equal option to active recreation needs and developing a means to quantify the need for passive recreation since it appears that dedication of these areas is based on such things as enrollment in soccer programs. We suggest two options for quantifying passive recreation needs is to evaluate the membership levels of organizations that cater to such passive activities as bird watching and/or put a question on the November ballot asking citizens of Rochester if they support dedication of passive recreation areas as equal in need to active recreation areas.”
- 6) “Identify means of contacting landowners and compensation for use of land affected by sewer expansion and water tower placement.”
- 7) “Specifically identify what is intended by “acceptable” impacts, and include the DNR in developing criteria for defining and determining “acceptable” impacts. Identify who will be responsible for monitoring compliance with the acceptable impacts and ensure adequate mitigation measures are taken.”
- 8) “Be more specific with the mitigation measures for impacts to the natural resources. Educating developers is simply not acceptable as the only mitigation means in areas with high development restriction or areas that harbor listed and/or sensitive species and habitats.”
- 9) “Identify some of the highest biodiversity areas within the AUAR project area as simply off limits to development. The City has the authority and obligation, not to mention a great opportunity through this AUAR, to protect the integrity of some of these areas for current and future citizens and for the intrinsic value of the resource.”
- 10) “Make the environmental review sheet a mandatory requirement for all developers within the AUAR project area and allow the DNR to assist with development of this worksheet.

Staff Response: The following response follows the “Summary of Concerns and Requested Action for the Marion Township AUAR” portion of the comment letter reprinted above. This entire comment letter, along with copies of all the comment letters, is included in the attached Appendix I.

Item 1. The locations of infrastructure facilities shown in the AUAR are conceptual. During the preliminary planning stage, the City routinely prepares a feasibility study to evaluate on a conceptual basis the locations, grades, costs, constructability, maintenance, accessibility, service potential, and other socio-economic and environmental issues associated with the extension of City sewer and water services. These studies are submitted to the City Council for review, and as such, are available for public review. Council approval of final designs and construction contracts is based on the information presented in these studies. The proposed general alignment of the Bear Creek sub-trunk is intended to provide gravity-flow sewer service to the new Platinum development (located along the south side of Eastwood Road), along with other future new developments and existing homes requesting service in this sub-watershed. Topographic features constrain alternative service options. The feasibility of a Bear Creek sub-trunk (which includes a cost analysis) is still being studied. Where feasible, infrastructure projects are planned to share existing right-of-way corridors such as highway rights-of-ways. However, sewer installation within floodways is an activity commonly permitted by MnDNR. Short-term construction projects

of this type that require restoration are not considered permanent development. All necessary permits are obtained from the authorized regulatory agencies and restoration per the agency requirements, at a minimum, is completed.

Item 2. The location of *Valeriana edulis* will be added as an unconfirmed state threatened species location, pending MnDNR Natural Heritage mapping that will formalize the location. As a point of clarification, the recent discovery of valerian is not within the AUAR project area. The valerian was identified in Rose Harbor, a developed neighborhood outside of the project area in two small undeveloped lots isolated by surrounding development outside of the project area in a steep slope hillside seep along the edge of an area already approved for development. Since the Blanding's turtle locations were incorporated from the official MnDNR Natural Heritage database GIS mapping purchased from the MnDNR, it is not appropriate to modify the locations. The occurrence of Blanding's turtle habitat and the potential for its occurrence along Bear Creek is included in the AUAR. Please refer also to Part II - Mitigation Plan, Part I, Section 4.1 – Natural Resources, and Part II, Section 11 - Fish, Wildlife, and Ecologically Sensitive Resources MnDNR comments and City responses pertaining to these issues. On a related note, a recent development in an area along Bear Creek with potential Blanding's Turtle habitat known as Country Meadows subdivision was designed as a cluster-style development, thereby preserving this habitat area in an outlot area that will not be developed.

Item 3. The AUAR text indicates that the MnDNR mapping is not exhaustive. Figure 1-4 Natural Resource Inventory also includes the Rochester Committee on Urban Design and Environment natural community mapping and information from other sources. We do acknowledge that an absence of MnDNR data regarding the existence of rare, threatened, endangered, or special concern species does not imply that they may not be present, only that the MnDNR has no records of their presence and have added this statement to the AUAR.

Items 4 and 5. Please refer to Part II, Section 6.8 - Parks, Trails, Natural Resource/Open Space Preservation and the MnDNR comments and City responses. In Table 2-1 of the AUAR, the City recognized that the amount of existing parkland is insufficient to meet future needs by stating that future parkland is yet to be determined based on specific future development proposals. Accordingly, their locations will also be determined as development proceeds or when land acquisition opportunities arise. The City will accelerate its Parkland Acquisition Plan update to identify natural areas suitable for passive recreational activities within natural resource corridors. Rochester's Committee on Urban Design and Environment (CUDE) has a long standing interest in identifying and protecting suitable natural resource areas and finding mechanisms to accomplish this. Currently, they have raised the issue of conducting a survey to evaluate the level of public support for preserving open spaces with the Mayor and will be pursuing this further in the upcoming months.

Item 6. This issue is outside the scope of the AUAR process. The City follows the same standard practices and state regulations for land acquisition, regardless of the type of public improvement project (e.g., roads, sewer, water, etc.). The City attempts to negotiate

a mutually satisfactory agreement with affected property owners. In the event an agreement cannot be reached, condemnation is used.

Item 7. As the local land use planning authority and the EQB-designated Responsible Governmental Unit for the AUAR, the City Council must determine unacceptable impacts and ensure that development and its associated mitigation is consistent with the AUAR. The AUAR identifies the unacceptable impacts requiring mitigation in Part III of the AUAR. The party responsible to oversee each specific mitigation measure is identified in Table 3-1. A MnDNR representative was invited to participate on the Technical Advisory Committee and provided input during the AUAR process. The development of the stewardship measures that were added to the Mitigation Plan resulted from this input.

In addition to local resources, the City uses state natural resource mapping, guidelines, and regulatory requirements to assess impacts. Please refer to Part III – Mitigation Plan MPCA comments and response regarding this item. The MnDNR has been the state leader in developing information on natural communities used at the local level. These statewide regulations drive implementation at the local level. As new regulations are adopted to provide additional environmental protection, the City will implement the revisions in the GDP review and AUAR update processes.

The Rochester-Olmsted Planning Department will have the general oversight responsibility for monitoring compliance with the AUAR and Mitigation Plan. They will accomplish this through the use of the Environmental Review Checklist and the GDP process. Additionally, a consortium of responsible road authorities (the Transportation Technical Advisory Committee) will oversee the results of traffic monitoring studies of track traffic conditions and feasibility studies for road improvement projects.

Item 8. Specific mitigation measures that will be implemented are fully described in the Mitigation Plan and summarized in Table 3-1. Please refer to the response to Item 2 above and Part II - Mitigation Plan, Part I, Section 4.1 – Natural Resources, and Part II, Section 11 - Fish, Wildlife, and Ecologically Sensitive Resources MnDNR comments and City responses.

Item 9. No high, moderate, or low areas of biodiversity significance were identified by the MnDNR within the project area. An area of “below” biodiversity significance was identified by the MnDNR as occurring along portions of Bear Creek. The CUDE information included in Revised Figure 1-4 presents additional natural community information. The stewardship measures described in the response to the MnDNR letter under Part II - Mitigation Plan will be implemented in addition to the existing regulatory and zoning requirements pertaining to natural resource impacts as the means to protect the integrity of some of these areas.

Item 10. As noted in the AUAR and in the response to MPCA comments in Part III-Mitigation above, the Environmental Review Checklist will be a required tool in the GDP process for all developers within the AUAR project area. The Environmental Review Checklist that is being developed will track compliance with the AUAR and address the

stewardship provisions. MnDNR, in the person of Don Nelson as a Technical Advisory Committee member, provided input for the adopted stewardship provisions that will be incorporated into the Environmental Review Checklist. It should be remembered that the AUAR replaces the need for independent Environmental Assessment Worksheets (EAWs) for projects that are consistent with the AUAR development scenario and do not trigger other environmental review requirements.

Jim Baier – Marion Township Supervisor

“First of all I want to let you know how much of an eye opener this process has been for me. Perhaps never before has there been such a level of open information available between governmental bodies.”

Appendix E: “I was quite surprised to see my father’s name on the well inventory list. My folks died in 1974, we sold their place in 1975 to Earl Thomann. In 1976 Mr. Thomann drilled a new well as did his neighbor Evelyn Grant. Many of these old sandpoint wells are not and have not been in use for perhaps decades. The information is flawed and would certainly bear further investigation. The inclusion of this inaccurate information could certainly prejudice the need for extension of city water and sewer service.”

Appendix F: “I have strong reservations against allowing the city to determine the final boundary. The project study area is an estimated 4315 acres, however during the preliminary draft AUAR process the city had identified a sewer extension outside the study area. This was called the Bear Creek/50th Avenue subtrunkline and extended nearly ½ mile north of the project area and had a planned build date of 2002/03. Recently the city has agreed to remove an additional 200-300 acres if the township would look at allowing the replacement of that block of land again changing the boundaries. If this project is to be built is should be progressive and serve those that it was intended for not just add new land to the city.”

Staff Response: Thank you for your comments on and participation in the AUAR process. Your local knowledge was particularly helpful.

Appendix E: The state well inventory (known as the County Well Index) is maintained by the Minnesota Geological Survey (MGS). These records are only updated periodically and, unfortunately, do sometimes contain information that is not current. It is likely that the most recent record the MGS had on the well was when it was installed. However, the MGS may not have received notice of well abandonment to incorporate into their records. If you are aware of abandonment records, it would be good to discuss this with the MGS and forward a copy of the record to them. The well inventory did not drive the WQPP. Water quality in the area was the driving force, not the specific location or number of wells.

Appendix F: As the Responsible Governmental Unit, EQB rules require that the City adopt an Order for Review that defines the project boundary. The project area boundaries are dynamic until adopted by the RGU. Although general comprehensive infrastructure planning occurs, multiple alignments are conceptualized. The ultimate locations, construction, and schedule for new infrastructure evolves over time based on development demand and the results of the feasibility analyses. The removal of 473 acres from the project area due to the Land Use Plan Amendment was discussed in the Introductory Information section at the beginning of Part I. If and when the Township allows replacement of the sewer capacity lost by this Land Use Plan Amendment, the City will

revisit the boundary issue and assess related environmental impacts in the appropriate manner.

Dean Waldof

“My wife and I own 80 acres that will directly be impacted by this project. Bear Creek winds through our property from the northeast corner to the southwest corner. Our property was the former Boy Scout Camp in Rochester for nearly seventy years. This piece of land has a long history and strong emotional ties to the people in the southeastern Minnesota. It was front-page news in the Rochester Post Bulletin when my wife and I “saved” this property when we purchased it in 1997. The article also talked about the petition signed by hundreds of residents requesting that this native Minnesota forest and prairie land be preserved. Our intent is just that. We currently live in the relatively small ranger house on the property and we intend to build a home deep in the woods and live out our lives there. We do not want to develop the property.”

“It would take decades for this native forest to recover from a sewer trunk line excavation. It would destroy the character of this land, which would not recover in our lifetime. We bought this property to enjoy and preserve it. It would be a crime to see it destroyed by a Public Works project especially when there are alternatives.”

“There are already utility easements along 20th Street and 42nd Avenue. If the sewer followed the road it would minimize the destruction of our and our neighbors’ properties. I have been told that the sewer line would need to be buried over sixty feet if it followed the road. This excuse does not seem fact based. Contour maps indicate that it is possible without that degree of excavation. The very highest point in the road (which is only for a couple of hundred feet) is at elevation of 1080 feet while the creek at that point is at 1040 feet. I doubt that the sewer would be buried twenty feet below the creek bed level. The sewer line only has to be lower than the lowest house to be serviced. Since homes cannot be built in the floodplain the sewer doesn’t have to be even as low as the creek level as it runs past our property. We believe we are entitled to see a proposal showing what it would actually take to run the sewer along 20th Street and 42nd Avenue.”

“If the sewer trunk cannot run along 20th Street than it would be preferable that it ran north of our property. There is a natural elevation drop along our north boundary and there is no land outside the floodplain that would be lower than the sewer trunk line.”

“For the cost of a few extra hundred feet of sewer line either one of these alternatives would save a rare section of native southeastern Minnesota forest and prairie land. Since we do not plan on developing this property it would also preserve the character and our intended use of the land.”

“I am also concerned that the proper care and property protection is taken during and after construction. The soil here is sandy and subject to erosion. There are also many sensitive birds and animals that consider our land a sanctuary. Trespassers on dirt bikes and ATV’s have cut fences and run over and killed young trees (many of which I had hand planted). They have also increased erosion by cutting into hillsides and creek banks. Before I was able to mend the fence on our southwest corner this spring we had dirt bikers tearing up our property. I hope they didn’t disturb too many sensitive species. We had a nesting pair of Blue Heron in our section of the creek, which I haven’t seen now for a few weeks. I mention this because it is critical that appropriate measures be taken during and after construction to

protect our property. We currently have fencing and/or natural barriers on all sides of our property. If construction removes these barriers... we WILL have motorized trespassers destroying our property. Temporary fencing during construction and permanent fencing afterwards are a must.”

“Our property needs to be protected not only from trespassers but also from people working on the project themselves. Trees can be destroyed simply by driving over their roots and compacting the soil. The soil here has never been disturbed and is easily compacted. Equipment needs to be kept only on the sewer trunk line path itself. No equipment should be driven into the woods or onto the native prairie... even just to turn around.”

“Oak trees require special protection. There is currently a battle going on in southeastern Minnesota to save oak trees from a disease called oak wilt. This fungus is transmitted between oak trees either through the root system or by the fungus attaching itself to a wound on the tree. The airborne fungus comes from oak trees that died from oak wilt the previous year. The dead tree will sporulate usually in the spring, but airborne oak wilt spores have been detected as late as August. Spores can attach themselves to an open wound within minutes. Any trimming or cutting of oaks needs to be protected immediately with pruning tar. This includes tree stumps since oak roots grow together into one large living organism. I have been working with the DNR and have spent hundreds of dollars and countless hours isolating healthy oak groves from oak wilt hot spots. Ed Hayes from the DNR is actually using our property as a showcase of what can be done to protect oak savanna from this disease. It would be preferable that horizontal boring equipment be used to install the sewer line near any major oak stands. It is also imperative that everyone working on this project is educated and sensitive to these (and other) environmental issues. This has already been a problem on THIS project. Yesterday (5/14/2002) Yaggy Colby workers were on our property marking our north property line with lath. In the process they removed some small oak trees (up to 20 feet tall) and cut some oak branches on larger trees. This MAY have been unavoidable in order to mark the property line but NOTHING was done to protect the wounds. It breaks my heart that after all my efforts and expense to protect this oak grove that these trees may already be infected by careless workers... even before the project officially begins. If workers on this project are so poorly educated or have such a flippant disregard for environmental issues... what other irreversible damage is going to be done before this project is over.”

Staff Response: Paragraph 3. Utility easements can be used to minimize the impact on affected property when topographic and physical conditions allow. The City can conduct an analysis of installing sewer along 20th St. SE and 42nd Avenue as suggested, in addition to the evaluation for the creek alignment and the north property line alignment. Regardless of which alignment is chosen, the sewer would likely be built to a depth of approximately 20 feet below the creek bed level. This depth is dependent on the percent grade needed to provide gravity flow for the sewer’s ultimate service area and the topographic features of its ultimate service area, not just the topography of the floodplain along Bear Creek. Along 20th St. SE, a depth of approximately 60 feet would be needed to provide the minimum percent grade needed to provide gravity flow for the same ultimate sewer area.

Paragraph 4. The sewer depth at the northwest corner of the Waldof property would need to be about 42 feet, assuming a minimum percent grade to provide functional gravity flow along the sub-trunkline.

Paragraph 5. The depths of either alignment option would impact the property to some degree. It would be the City's intent to minimize short-term and long-term disturbance from construction activity.

Paragraph 6. The City and its contractors will work with the Waldof's and other affected property owners to protect and restore their property, whichever alignment is finally selected. The timeframe for "recovery" from construction depends on the type of habitat impacted. Grasslands and wetlands can be quite resilient and restoration can be substantially complete within a few years. Woodlands would be permanently altered because trees cannot be replanted directly over the sewer line due to maintenance concerns. This change in landscape is often more noticeable in upland woodlands that have mature stands than in lowland floodplain forests whose maturity can be much younger from repeated disturbance due to flooding. In either case, the creation of habitat mixes results, often with increases in species diversity.

Paragraph 7. Protective measures can and will be taken. Easements can and will be defined prior to construction.

Paragraph 8. This situation has occurred. We are trying to work with the Waldof's to determine what action is required on their property to correct the unfortunate damage.

**MODIFICATIONS MADE TO
PART II-MARION ROAD TRUNK SANITARY SEWER PROJECT ALTERNATIVE
URBAN AREAWIDE REVIEW RESPONSE TO QUESTIONS**

11.0 FISH, WILDLIFE AND ECOLOGICALLY SENSITIVE RESOURCES

b. Are any state-listed (endangered, threatened or special concern) species, rare plant communities or other sensitive ecological resources such as native prairie habitat, colonial waterbird nesting colonies or regionally rare plant communities on or near the site?

 x Yes No

If yes, describe the resource and how it would be affected by the project. Indicate if a site survey of the resources has been conducted and describe the results. If the MnDNR Natural Heritage and Nongame Research program has been contacted give the correspondence reference number See below. Describe measures to minimize or avoid adverse impacts.

AUAR Guidance: b. For an AUAR, prior consultation with the MnDNR Natural Heritage program for information about reports of rare plant and animal species in the vicinity is required. If such consultation indicates the need, an on-site habitat survey for rare species in the appropriate portions of the AUAR area is required. Areas of on-site surveys should be depicted on a map, as should any "protection zones" established as a result.

11.a.1.2.4 Badger Run

The upper portion of Badger Run, just downstream from 50th Avenue (CSAH 11), flows through or adjacent to, a series of wet meadow/sedge meadow wetlands. The wetlands and the slightly higher land adjacent to them are presently used for pasture. The lower portion of Badger Run flows through pastured areas of hobby farms and residential areas. Much of the riparian fringe in this reach of Badger Run is affected by debris and fill placed in the floodplain. Runoff from residential septic systems (outlet pipes from drain fields) and livestock is evident in places along this reach. The habitat value of this section Badger Run could improve if some of these negative aspects were improved.

Natural Communities

At the time of European settlement, the vegetation of Badger Run was dominated by oak savanna and oak woodland-brushland. Along the creek itself, wet prairie and wet meadow wetlands would have also been present.

The upper portion of Badger Run just below 50th Avenue (CSAH 11) contains numerous wet meadow wetlands. Because of drainage and cattle grazing, most of these wetlands are degraded and dominated by reed canary grass with scattered pockets of hummock sedge and blue vervain. The surrounding pastures are grazed heavily and generally contain a mixture of brome and blue grass. The lower portion of Badger Run (downstream from 30th Avenue SE) is characterized by a narrow riparian fringe of low quality floodplain forest dominated by boxelder and eastern cottonwood or shrub swamp dominated by willow, dogwood, and reed canary grass. Along Pinewood Road, several tracks of oak forest and

oak woodland-brushland are present. The more moist, mesic forested natural communities occur on north facing slopes and are dominated by burr oak, basswood, red oak, white oak, and American elm.

Wildlife

Wildlife quality habitat is moderate within Badger Run. The quality of wildlife habitat is reduced due to the poor overall quality of natural communities in this corridor and the lack of connection between Badger Run and upland wildlife habitat.

Fisheries

An initial stream survey was conducted by MnDNR in 1995. The stream is not a recreational stream and has been substantially affected by agricultural land use and urban encroachment. It is likely that many of the fish species present in the lower portions of Bear Creek are present in, or would migrate into, Badger Run. Beaver dams and low water levels may act as a barrier to upstream fish migration during some years.

11.b.1 Natural Heritage Program

The MnDNR Natural Heritage Program (NHP), data was obtained from the MnDNR and is included in Figure 1-4. The MnDNR was contacted regarding providing a coordination letter (Sarah Hoffman personal communication). Since the City purchased the electronic database containing NHP data from the MnDNR, a coordination letter was not required NHP review of the AUAR utilizing this database information will be conducted.

There are two natural heritage recorded wildlife species that occur within the project area, the Blanding's turtle (state listed threatened) and the Blue racer snake (state listed special concern). There are no state listed endangered species recorded for the project area. It is acknowledged that an absence of MnDNR data regarding the existence of rare, threatened, endangered, or special concern species does not imply that they may not be present, only that the MnDNR has no records of their presence.

11.b.1.3 Other Information

Investigations conducted during the development of the *Stormwater Plan*, initiated in the mid- to late-1990s, identified NHP species associated with Bear Creek and Badger Run. Two records of Blanding's turtle and two records of Blue racer snakes were shown. One record of a Blanding's turtle is shown for the upper portion of Badger Run. The occurrence of the Blanding's turtles is possible along much of Badger Run due to the number of wetlands along the Creek.

Additionally, the black redhorse is a special concern fish species found only in a few drainage areas of southeast Minnesota. This species has been documented during fishery surveys of Bear Creek. The black redhorse has been collected from the lower reach of Bear Creek. Within the lower portions of Badger Run, the potential occurrence of the black redhorse would be likely due to the presence of this species in Bear Creek.

Valerian (*Valeriana edulis*), a threatened prairie plant, was recently discovered outside of the AUAR project area (Revised Figure 1-4). This species appears to require a moist, sunny, calcareous habitat. The valerian was identified in Rose Harbor, a developed neighborhood, in two small undeveloped lots isolated by surrounding development in a steep slope hillside seep along the edge of an area already approved for development. This occurrence is not documented on MnDNR's official Natural Heritage Inventory database. The general, unconfirmed location of this plant is noted on the revised Figure 1-4.

An unconfirmed occurrence of sweet smelling Indian-plantain (*Cacalia suaveolens*) was noted outside of the project area as part of the stormwater study (Revised Figure 1-4). The native habitat of this plant in Minnesota appears to be wet meadows along stream courses and the edge of marshes. With the loss of its native habitat, this species may now be restricted to wet ditches.

A coordination letter was sent to the U.S. Fish and Wildlife Service (USFWS). The USFWS response letter (Appendix D) stated that the bald eagle (*Haliaeetus Leucocephalus*), Leedy's roseroot (*Sedum integrifolium* spp. *Leedyi*), and prairie bush clover (*Lespedeza leptostachya*) are listed as federally threatened in Minnesota and documented to occur in Olmsted County. However, there are no records indicating that these species occur within the project area. Given the location and type of activity proposed, the USFWS determined that the project is not likely to adversely affect any federally listed or proposed federally threatened or endangered species or adversely modify their critical habitat. This precludes the need for further action on this project as required under Section 7 of the Endangered Species Act of 1973.

25.0 NEARBY RESOURCES

Are Any of the Following Resources on or in Proximity to the Site?

- a. Archaeological, historical or architectural resources? ☒ Yes ☐ No
- b. Prime or unique farmlands or land within an agricultural preserve? ☒ Yes ☐ No
- c. Designated parks, recreation areas or trails? ☒ Yes ☐ No
- d. Scenic views and vistas? ☒ Yes ☐ No
- e. Other unique resources? ☒ Yes ☐ No

If yes, describe the resource and identify any project-related impacts on the resource. Describe any measures to minimize or avoid adverse impacts.

25.a.1 Archeological, Historic, and Architectural Resources

AUAR Guidance: For an AUAR, contact with the State Historic Preservation Office is required to determine whether there are areas of potential impacts to these resources. If any exist, an appropriate site survey of high probability areas is needed to address the issue in more detail. The mitigation plan must include mitigation for any impacts identified.

The 106 Group, Ltd., a consulting firm that specializes in cultural resource evaluations, conducted a preliminary cultural resources review of the project area. This review included a preliminary cultural resource evaluation for archaeological, historical, and architectural resources for the AUAR project area. This work included a records search to identify recorded cultural resource sites already known to exist and a “windshield survey” of the project area to identify areas with the potential for intact cultural resources. In addition, a coordination letter was sent to the State Historic Preservation Office (SHPO) on December 20, 2001, and the response is included in Appendix D. **The Cultural Resource Report is attached as Appendix H.**

Archaeologists identified areas with a high or moderate potential for archaeological resources based on their topographic location, proximity to water resources, and relative lack of site disturbance. Three types of archaeological resource areas were mapped: one recorded archaeological site, an area of moderate archaeological potential, and two areas of high archaeological potential. Areas of potential historical and architectural significance were also identified (**Revised** Figure 1-7). The majority of the project area is considered to exhibit low archaeological potential based on topography, disturbances by residential homes, recent development, agriculture, and the presence of wetlands. The City will require that developers coordinate with the SHPO prior to developing any of the areas identified as having a high or moderate potential for intact archaeological resources or having historic or architectural significance. This may include a Phase I archaeological survey and/or historic and architectural assessment prior to development. It is important to consider for scheduling purposes that spring and fall are the optimal times for Phase I cultural resource surveys.

One area considered to exhibit moderate potential for intact archaeological resources is a relatively undisturbed area of higher elevation to the east of Hilltop Avenue. The area begins in a small wooded area that begins directly adjacent to and runs the full length of Hilltop Avenue, then extends 1.5 to 2 miles to the north and east. As this area extends to the east, the woods become interspersed with

cornfields. The area is a significant distance from a waterway and therefore was ranked as having only moderate potential for intact archaeological resources.

Two other areas were considered to exhibit high potential for intact archaeological resources. The first of these is the undisturbed wooded area that surrounds a large segment of Bear Creek to the south of the previously described hilltop. Bear Creek is a sizeable tributary of the Zumbro River, and along segments of the creek, archaeological sites have been previously recorded close to the project area. The combination of the previous discovery of archaeological sites along the this waterway and the low level of disturbance suggests a high potential to find intact archaeological resources within 500 feet of this portion of Bear Creek.

A large segment of Badger Run exhibits high potential for intact archaeological resources. This area, which is south of the Bear Creek area, is surrounded by agricultural fields and residences, but is itself undisturbed. The proximity of Badger Run to Bear Creek, its perennial nature, and the lack of disturbance in the wooded area make this area within 500 feet of Badger Run one with a high potential for intact archaeological resources.

One recorded archaeological site, the Trapp Mounds, has been recorded on the former farmstead of Mr. Leslie Trapp, located along Highway 14 in the SW $\frac{1}{4}$ of Section 4, T106N, R13W (Wilford 1944; Oothoudt 1976). A memorandum (Wilford 1944) attached to a set of miscellaneous notes (Oothoudt 1976) contained in the SHPO files pertains to this area; however, these mounds may not exist. There is a prominent ridge behind the Trapp farmhouse, but no obvious earthworks are on it. Two circular spots that have some prominence are very low for mounds. Though the existence of the Trapp Mounds is suspect, the Minnesota Private Cemeteries Act, which prohibits the disturbance of burials, and the significance attributed to the mounds by the Native American groups require that the possible existence of the mounds be further explored. This would need to be accomplished by developers prior to development.

The project area contains several structures that were determined to be older than 50 years and may have some historic architectural significance. One property within the project area was previously recorded on a statewide architectural survey conducted in the 1970's. This property is the Marion Town Hall located in the SW $\frac{1}{4}$ of the SW $\frac{1}{4}$ of Section 22, T106N, R13W (OL-MAR-003). The inventory form noted that the structure might have been moved from an earlier location about 1.5 miles north. If it were confirmed that the property has been moved, the building would be considered not eligible for listing on the National Register of Historic Places (NRHP), unless it has extraordinary significance. Approximately seven residences in the Homewood Addition dating to the early twentieth century are within the project area and retain good historical integrity. Also, two tourist cabin-lodging establishments are located within the project area on the south side of Marion Road in Sections 7 and 17. The Marvale Subdivision, a development of more than 50 post-World War II residences on four streets, is located in the western portion of the project area.

MODIFICATIONS MADE TO PART III – MARION ROAD TRUNK SANITARY SEWER PROJECT AUAR - MITIGATION PLAN

AUAR Guidance: The final AUAR document must include an explicit mitigation plan. At the RGU's option, a draft plan may be included in the draft AUAR document; of course, whether or not there is a separate item for a draft mitigation plan, proposed mitigation must be addressed through the document.

It must be understood that the mitigation plan in the final document takes on the nature of a commitment by the RGU to prevent potentially significant impacts from occurring from specific projects. It is more than just a list of ways to reduce impacts—it must include information about how the mitigation will be applied and assurance that it will. Otherwise, the AUAR may not be adequate and/or specific projects may lose their exemption from the individual review. The RGU's final action on the AUAR must specifically adopt the mitigation plan; therefore, the plan has a “political” as well as a technical dimension.

1.0 INTRODUCTION

This Mitigation Plan has been prepared to summarize the major components of the AUAR and identify mitigation steps for unacceptable impacts in each issue area. This mitigation plan specifies the mitigation measures, institutional controls, and oversight authority for each feature receiving unacceptable impacts caused by development that is in accordance with the hypothetical development scenario.

To mitigate unacceptable environmental impacts identified in the Marion Road Trunk Sanitary Sewer Project AUAR, the following mitigation measures have been identified. As existing ordinances, plans, and regulations are amended, modified, or replaced, they will be applicable to the AUAR project area. The changes may trigger an AUAR update only if mitigation measures need to be modified as a result of these changes. Plans and policies provide guidance and context for future development that is implemented via ordinances and resolutions adopted by the City Council. In some cases, other jurisdictional units are responsible for implementation of mitigation measures. In such cases, the City will take reasonable and good faith efforts to secure such actions from its governmental counterparts that have the authority and responsibility for implementing noted mitigation measures.

- All permits identified in the AUAR will be secured by the City, or other public or private parties as appropriate, for all development activities within the project area.
- The City will follow the guidance and context in its adopted policies and plans and oversee the implementation of its own regulations as they apply to the review and approval of all development activities within the project area. These items include the *Land Use Plan for the Rochester Urban Service Area* and the *City of Rochester Code of Ordinances*. The City's *Stormwater Management Plan* and *Comprehensive Wetland Management Plan* will be used as technical resources in reviewing development activities. County planning documents will be followed as appropriate for interim development, including the *Olmsted County General Land Use Plan*, the *Olmsted County Zoning Ordinances*, and the *Olmsted County Comprehensive Water Management Plan*.
- The City's extension of sewer and water services will progress consistent with development needs, WQPP guidelines, and this AUAR. Well and septic system construction and abandonment regulations will be followed in the project area.

- The appropriate roadway authority will monitor traffic changes associated with new development within the AUAR project area and will implement improvements identified in this AUAR as dictated by traffic levels.
- The City will require the design and construction of adequate regional and local stormwater ponds and trunk facilities to protect water resources and water quality as required by the *City of Rochester Code of Ordinances*.
- The City will implement a tracking mechanism to monitor development and its conformance with the development scenario.
- Transitional lot size densities consistent with Section 63.111 of the *City of Rochester Code of Ordinances* will be followed for development adjacent to large lot subdivisions.
- The City will implement existing floodplain, wetland, shoreland zoning, and related natural resource regulations per the *City of Rochester Code of Ordinances*. Consideration will also be given to natural communities and Decorah-Edge protection measures during the GDP review process. County planning documents will be followed as appropriate for interim development, including the *Olmsted County General Land Use Plan*, the *Olmsted County Zoning Ordinance*, and the *County Comprehensive Water Management Plan*.
- The City will implement the following stewardship mitigation measures to address the needs of this specific project.
 1. Educate:
 - a. Decision-makers, the development community, local government staff, and citizens on the benefits of and programs available for natural areas conservation and land stewardship.
 - b. Existing landowners prior to the conception of development plans for their land to inform them about alternative development styles and tools available to conserve the natural resources present on their property.
 2. Prepare an Environmental Review Checklist for use by developers to confirm their understanding of the AUAR data, identify the Mitigation Plan measures applicable to their development proposals, and document their developments' consistency with the hypothetical development scenario. In lieu of completing an EAW worksheet, the Checklist will outline natural resource features, mitigation measures, and land stewardship options as part of the General Development Plan review process as a means to encourage developers to fit the subdivision to the land rather than make the land fit the subdivision.
 3. Provide the development community, consulting firms, governmental units, and referral agencies with examples of conservation design subdivisions and other stewardship tools along with electronic data (e.g., CDs or ArcIMS access on the Internet) that delineates sensitive areas and links AUAR data and mitigation requirements with parcel base maps for use in project design and review.

4. Update the City of Rochester's *Parkland Acquisition Plan* by the spring of 2003 to identify future park needs in the AUAR project area including the identification of floodplains and other natural areas appropriate for public land acquisition in consideration of passive use and environmental corridor development.
5. Update the *Rochester Urban Service Area Land Use Plan Map* to delineate cultural (archaeological, historic, and architectural) sites and environmental corridors located in the recently expanded areas of the City's Urban Service and Urban Reserve Areas by the end of 2004.

2.0 ISSUES AND MITIGATION

This section identifies unacceptable impacts that generated mitigation measures. Revised Table 3-1 presents a summary of mitigation measures that are addressed in this Mitigation Plan.

REVISED TABLE 3-1

**SUMMARY OF MITIGATION MEASURES
 Marion Road Trunk Sanitary Sewer Project AUAR**

Impacted Feature	Mitigation Measure(s)	Institutional Control	Oversight Authority
NEARBY RESOURCES (Part II, Section 25)			
PARKS, RECREATION AREAS, OR TRAILS	<p>Consideration of parkland acquisition as noted in the Stewardship mitigation measures identified this table.</p> <ul style="list-style-type: none"> • Dedicating parkland from each development proposal. • Considering dedication of natural resource features. • Updating the <i>Parkland Acquisition Plan</i> by the spring of 2003 to identify future park needs in the AUAR project area, particularly significant segments of environmental corridors with consideration of cooperative purchases. • Updating <i>City Plan</i> map to delineate environmental corridors in the USAs/URAs. 	<p><i>Land Use Plan for the Rochester Urban Service Area, City of Rochester Code of Ordinances</i> (Section 64.440), and the City of Rochester Park and Recreation Parkland Acquisition Plan.</p>	<p>City of Rochester, Olmsted County, City of Rochester Park Department.</p>

REVISED TABLE 3-1

**SUMMARY OF MITIGATION MEASURES
Marion Road Trunk Sanitary Sewer Project AUAR**

Impacted Feature	Mitigation Measure(s)	Institutional Control	Oversight Authority
STEWARDSHIP ITEMS			
NATURAL AND CULTURAL RESOURCES	Educate the community at large on benefits of environmental stewardship and share AUAR resource data with landowners of undeveloped land.	City Adoption of AUAR and Mitigation Plan.	Rochester- Olmsted Planning Department.
	Completion of an Environmental Resource Checklist by developers to confirm understanding of AUAR data, identify applicable mitigation measures, document consistency with hypothetical development scenario, and raise awareness of stewardship opportunities.	City Adoption of AUAR and Mitigation Plan.	Rochester- Olmsted Planning Department.
	Data transfer to provide stewardship information and AUAR resource data to entities involved in the development process.	City Adoption of AUAR and Mitigation Plan.	Rochester- Olmsted Planning Department
	Update <i>Parkland Acquisition Plan</i> by <i>the spring of 2003</i> to identify areas appropriate for land acquisition.	City Adoption of AUAR and Mitigation Plan and the City of Rochester <i>Parkland Acquisition Plan</i> .	Rochester Park Department
	Update the <i>Rochester USA Land Use Plan Map</i> to delineate cultural resource sites and environmental corridors.	City Adoption of AUAR and Mitigation Plan.	Rochester- Olmsted Planning Department

2.2.3 Parkland

Parkland and recreation areas are considered to be one of the essential services that should be provided in the future USAs/URAs of the City of Rochester. Parkland needs is evaluated on a plat by plat basis. Three primary tools provide direction on how future parkland should be planned: The *City Land Use Plan*, the *City of Rochester Code of Ordinances*, Section 64.440, and the *City of Rochester Parkland Acquisition Plan*. There are a number of general policy questions that affect the entire Rochester USA/URA. Chapter III of the *City Plan* lists specific issue statements to help clarify the interpretation of the Growth Guidelines, some of which deal with the concepts of natural areas conservation and land stewardship. The *Parkland Acquisition Plan* further defines park policies in both an area specific manner and a community wide manner. The following key points are summarized from the three sources listed above.

- It is the intent of the *City Plan* to encourage the acquisition of land for future park development, including neighborhood, community and special parks, as well as environmental corridors.
- Parkland is a desirable element within environmental corridors along rivers and waterways for trail development, including a minimum width of 200 feet where possible.
- Natural resource based parks containing the following resources are encouraged:
 - a. Impounded water areas with potential recreational values encompassing with a minimum of 1.5 acres.
 - b. Sites with unique topographic relief and scenic vistas, with a minimum slope of 20 percent with at least a 100' vertical difference in elevation.
 - c. Wooded areas that would otherwise be denuded with urbanized development including a minimum of ten acres.
 - d. Wetlands of Type 2 and 3 (State and Federal Classification) that could be a value for wildlife and environmental education, with a minimum size of 5 acres.
- In general, parklands should be protected from any type of encroachment, including the construction of buildings, streets, highways, parking lots, utilities, and other structures, consistent with the need to balance recreational and environmental needs with other physical and social needs.

The mitigation will include:

- Dedicating parkland from each development proposal.
- Considering the dedication of natural resource features in lieu of neighborhood parks and recreational fields as a future parkland dedication option.

- Updating the *Parkland Acquisition Plan* by the spring of 2003 to identify future park needs in the AUAR project area and locations appropriate for public land acquisition, particularly significant segments of environmental corridors with consideration given to cooperative purchases.
- Updating the *City Plan* map to delineate environmental corridors in the USAs/URAs that could provide recreational opportunities.

2.3.5.1 Endangered and Threatened Species

No state-listed endangered species occur within the project area.

As described above, the Blanding's turtle (*Emydoidea blandingii*) was recorded as occurring at two locations within the project area. The Blanding's turtle is a state-listed threatened species associated with sandy soils and a variety of wetland types. It may also occur along other portions of Badger Run. A species is ranked as threatened if the species is likely to become endangered within the foreseeable future throughout all or a significant portion of its range.

The preferred habitat of the Blanding's turtle includes calm, shallow water, rich, aquatic vegetation and sand uplands for nesting. Studies by Congdon *et al.* (1983) in Michigan and by Linck in Massachusetts have shown that nesting females may travel considerable distances (200 to 400 meters) to nesting areas, passing enroute what appears to be suitable nesting habitat immediately adjacent to the marsh in which they reside (Coffin and Pfannmuller 1988).

Preferred Habitat

Blanding's turtles need both wetland and upland habitats to complete their life cycle. The types of wetlands used include ponds, marshes, shrub swamps, bogs, and ditches and streams with slow-moving water. In Minnesota, Blanding's turtles are primarily marsh and pond inhabitants. Calm, shallow waterbodies (Type 1 to 3 wetlands) with mud bottoms and abundant aquatic vegetation such as cattails and water lilies are preferred, and extensive marshes bordering rivers provide excellent habitat. Small temporary wetlands that dry up in the late summer or fall are frequently used in the spring and summer. These pools do not harbor fish and are amphibian and invertebrate breeding habitat that provide an important food source for Blanding's turtles. Wetlands with deeper water are needed in times of drought, and during winter. Blanding's turtles overwinter in the muddy bottoms of deeper marshes and ponds, or other water bodies where they are protected from freezing. Blanding's turtles have been known to nest successfully on residential property (especially low density housing situations), and to utilize disturbed areas such as farm fields, gardens, utility corridors, and road rights-of-way. Although turtles travel through woodlots during their seasonal movements, shady areas are not used for nesting.

Impacts, Threats, and Causes of Decline

- Loss of wetland habitat through drainage or flooding to convert wetlands into ponds or lakes.
- Loss of upland habitat through development or conversion to agriculture.

- Human disturbance including illegal collection for pet trade and road kills during seasonal movements.
- Increases in predator populations (skunks, raccoons, etc.) that prey on nests and young.

Recommendations for Avoiding and Minimizing Impacts

In long-lived species, protecting the adults is critical to any conservation strategy. A female turtle may produce as many as 500 eggs during her life. Losing many of these long-lived females, through habitat loss or direct mortality, would seriously jeopardize the ability of a population to maintain itself.

Tables 3-2 and 3-3 provide a summary of recommendations to avoid or minimize impacts to Blanding's turtles adapted from MnDNR guidelines. These recommendations apply to typical construction projects and general land use within Blanding's turtle habitat, and are provided by the MnDNR to help minimize or avoid detrimental impacts to Blanding's turtle populations. Table 3-2 describes minimum measures that are recommended to prevent harm to Blanding's turtles during construction or other work within Blanding's turtle habitat during construction. Table 3-3 contains recommendations that offer greater protection to be used in addition to the first list in areas that are known to be of state-wide importance to the species or in any other area where greater protection is desired. The MnDNR has identified the Blanding's turtle locations shown on Revised Figure 1-4 as having state-wide importance, therefore, recommendations for protection outlined in both Revised Table 3-2 and Revised Table 3-3 apply. As the AUAR area develops, rural roadways with ditches are less likely to be constructed than more urban curbed roadways. Thus the use of tunnels and curb criteria will be important considerations.

2.3.5.2 Rare and Special Concern Species

The Blue racer snake (*Coluber constrictor*) is a state listed species of special concern that is recorded to occur within the project area. A species is listed as special concern if, although the species is not endangered or threatened, it is extremely uncommon in this state, or has unique or highly specific habitat requirements and deserves careful monitoring of its status. Species on the periphery of their range that are not listed as threatened may be included in this category along with those species that were once threatened or endangered but now have increasing or protected, stable populations.

The Blue racer occupies a variety of habitats in the deciduous forest regions of Minnesota, including forested hillsides, bluff prairies, grasslands, and open woods. Woodland margins and field edges are the preferred summer habitats (Coffin and Pfannmuller 1988). Individuals live in a variety of open dry habitats such as brushy areas along the edges of deciduous woodlands, grass prairies, bluff prairies, and old fields. Because these snakes primarily hunt by sight, they avoid areas of dense vegetation. Racers overwinter in mammal burrows, rock crevices, gravel banks, stone walls, and abandoned wells. They may share these winter homes with other racers, Timber rattlesnakes, Rat snakes, Gopher snakes, and common Garter snakes. The destruction and loss of habitat are the greatest threat to amphibian and reptile populations and is especially critical to rare species. Pesticide accumulation, hunting, and over-collecting also pose a threat.

REVISED TABLE 3-2

RECOMMENDATIONS FOR AREAS INHABITATED BY BLANDING'S TURTLES
Marion Road Trunk Sanitary Sewer Project AUAR

GENERAL GUIDELINES
The MnDNR brochures "Protecting Blanding's Turtle Nests" and "Caution- Blanding's Turtle May Be Encountered in This Area" (which has an illustration of a Blanding's turtle) should be given to homeowners and all developers and contractors working in the area.
Turtles that are in imminent danger should be moved by hand out of harm's way. Turtles that are not in imminent danger should be left undisturbed.
If a Blanding's turtle nests in your yard, do not disturb the nest.
Silt fencing should be set up to keep turtles out of construction areas, but not restrict connections to their habitat. It is critical that silt fencing be removed after the area has been revegetated.
WETLANDS
Small, vegetated temporary wetlands (Types 2 and 3) should not be dredged, deepened, filled, or converted to stormwater retention basins in Blanding's turtle habitats. These wetlands provide important habitat during spring and summer.
Wetlands should be protected from pollutions. The use of fertilizers and pesticides should be avoided, and runoff from lawns and streets should be controlled. Erosion should be prevented to keep sediment from reaching wetlands and lakes.
ROADS
Roads should be kept to minimum standards on widths and lanes as this reduces road kills by slowing traffic and reducing the distance turtles need to cross.
Roads should be ditched, not curbed or constructed below grade. If curbs must be used four-inch high curbs at a 3:1 slope are preferred. Blanding's turtles have great difficulty climbing traditional curbs and below-grade roads trap turtles on the road and can cause road kills.
Culverts between wetland areas, or between wetland areas and nesting areas, should be 36 inches or more in diameter and elliptical or flat-bottomed.
Wetland crossings should be bridged, or include raised roadways with culverts that are at least 36 inches in diameter and elliptical or flat-bottomed. Raised roadways discourage turtles from leaving the wetland to bask on roads.
Culverts under roads used as stream crossings should be oversized at least twice as wide as the normal width of open water and elliptical or flat-bottomed.
UTILITIES
Utility access and maintenance roads should be kept to a minimum to reduce road-kill potential.
Below-ground utility construction sites should be returned to original grade, trenches could trap turtles.
LANDSCAPING AND VEGETATION MANAGEMENT
Terrain should be left with as much natural contour and cover as possible.
Graded areas should be revegetated with native grasses and forbs. Some non-natives form dense patches that hinder turtle movement.
Vegetation management in infrequently mowed areas, such as in ditches or along utility access roads, and under power lines, should be done mechanically rather than by using chemicals. Work should be done after October 1 and before June 1 and care should be taken while mowing to avoid turtles that may be present.

REVISED TABLE 3-3

**ADDITIONAL RECOMMENDATIONS FOR BLANDING'S TURTLE
STATE-WIDE IMPORTANCE AREAS
Marion Road Trunk Sanitary Sewer Project AUAR**

GENERAL GUIDELINES
Turtle crossing signs can be installed adjacent to road crossing areas used by Blanding's turtles to increase public awareness and reduce road kills.
Workers in the area should be aware that Blanding's turtles nest in June, generally after 4:00 pm, and should be advised to minimize disturbance if turtles are seen.
Construction in potential nesting areas should be limited to the period between September 15 and June 1 when the activity of adults and hatchlings in upland areas is at a minimum.
Silt fencing should be set up to keep turtles out of construction areas, but not restrict connections to their habitat. It is <u>critical</u> that silt fencing be removed after the area has been revegetated.
WETLANDS
Shallow portions of wetlands should not be disturbed during prime basking time (mid-morning to mid-afternoon in May and June and summer. A wide buffer should be left along the shore to minimize human activity near wetlands. Basking Blanding's turtles are more easily disturbed than other turtle species.
Wetlands should be protected from road, lawn, and other chemical run-off by a vegetated buffer strip at least 50 feet wide. This buffer should be left unmowed and in a natural condition.
ROADS
Tunnels should be considered in areas with concentrations of turtle crossings of more than ten turtles per year per 100 meters of road, and in areas of lower density if the level of road use would make a safe crossing impossible for turtles. The MnDNR Regional Nongame Specialist can provide additional information on wildlife tunnels.
Roads should be ditched, not curbed or constructed below grade.
Road placement should avoid separating or bisecting wetlands from adjacent upland nesting sites, or these roads should be fenced to prevent turtles from attempting to cross. Contact MnDNR for detailed information. This is especially important for roads with more than two lanes.
Roads crossing streams should be bridged as opposed to using culverts.
LANDSCAPING AND VEGETATION MANAGEMENT
As much natural landscape as possible should be preserved. The installation of sod or wood chips, paving, and planting of trees within nesting habitat can make that habitat unusable to nesting Blanding's turtles.
Open space should include some areas at higher elevations for nesting. These areas should be retained in native vegetation, and should be connected to wetlands by a wide corridor of native vegetation.
Preferentially, ditches and utility access roads should not be mowed or managed through the use of chemicals. If vegetation management is required it should be done mechanically and as infrequently as possible and after October 1 and before June 1 and care should be taken while mowing to avoid turtles that may be present. Mowing can kill turtles present during mowing and makes it easier for predators to locate turtles crossing roads.

Footnote was deleted.

The black redhorse (fish species of special concern) has been collected from the lower reach of Bear Creek. Within the lower portions of Badger Run, the possible occurrence of the black redhorse would be likely due to the presence of this species in Bear Creek.

As a mitigation strategy, the City of Rochester will educate landowners, developers, and contractors regarding the habitat needs and avoidance, minimization, and mitigation measures that pertain to existing threatened and special concern species as part of an education process.

2.11 Cultural Resources

Where areas of recorded archaeological sites, high or moderate potential for intact archaeological sites, or sites with potential historic or architectural significance have been identified, the City will require developers to coordinate with the SHPO regarding the evaluation of potential archaeological, historic, or architectural sites identified in the inventory prior to development. This may include the completion of a Phase 1 Archaeological Survey and/or historic and architectural assessment. A portion of the project area that was added after the cultural resource reconnaissance was completed was not included in the reconnaissance (Revised Figure 1-7). Further reconnaissance was not pursued because a land use plan amendment was pending. The amendment has since been adopted, removing this area from AUAR jurisdiction.

3.0 STEWARDSHIP MITIGATION MEASURES

This section describes mitigation measures to address the needs of this specific project. The City will implement the following stewardship mitigation measures.

1. Educate:
 - a. Decision-makers, the development community, local government staff, and citizens on the benefits of and programs available for natural areas conservation and land stewardship.
 - b. Existing landowners prior to the conception of development plans for their land to inform them about alternative development styles and tools available to conserve the natural resources present on their property.
2. Prepare an Environmental Review Checklist for use by developers to confirm their understanding of the AUAR data, identify the Mitigation Plan measures applicable to their development proposals, and document their developments consistency with the hypothetical development scenario. In lieu of completing an EAW worksheet, the Checklist will outline natural resource features, mitigation measures, and land stewardship options as part of the General Development Plan review process as a means to encourage developers to fit the subdivision to the land rather than make the land fit the subdivision.
3. Provide the development community, consulting firms, governmental units, and referral agencies with examples of conservation design subdivisions and other stewardship tools along with electronic data (e.g., CDs or ArcIMS access on the Internet) that delineates sensitive areas and links AUAR data and mitigation requirements with parcel base maps for use in project design and review.

4. Update the City of Rochester's *Parkland Acquisition Plan* by the spring of 2003 to identify future park needs in the AUAR project area including the identification of floodplains and other natural areas appropriate for public land acquisition in consideration of passive use and environmental corridor development.
5. Update the *Rochester Urban Service Area Land Use Plan Map* to delineate cultural (archaeological, historic, and architectural) sites and environmental corridors located in the recently expanded areas of the City's Urban Service and Urban Reserve Areas by the end of 2004.

REVISED FIGURES